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# DEFINITIONS OF ECONOMIC AND TECHNICAL TERMS USED IN NORTH KOREA

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## DEFINITIONS OF ECONOMIC AND TECHNICAL TERMS USED IN NORTH KOREA

This report is a translation of definitions of 246 economic and technical terms as presented in a supplement to the North Korean monthly periodical, Kyongje Konsol, published in P'yongyang and dated No 8, August 1956.

According to the editorial board of the periodical the terms were selected from documents of the Third Congress of the Korean Labor Party (North Korean Communist Party).

The terms have been romanized according to the McCune-Reischauer system, arranged alphabetically and appended to this report.

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#### INDEX TO TERMS

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#### English Term

Acetic acid (II, D, 19.) Acetylene (II, D, 25.) Acid Resistant and Alkali Resistant Products (II, D, 17.) Alloy Metals (II, B, 19.) Alternating Current (II, C, 12.) Ammonium Chloride (II, D, 15.) Ammonium Nitrate (II, D, 14.) Ammonium Sulfate (II, D, 13.) Amount of Evaporation of Fuel Calorie (II, F, 36.) Applied Chemistry (II, D, 1.) Artificial (Sythetic) Resin for Use in Electric Insulation (II, D, 23<sub>6</sub>) Automatic Lock-out Apparatus (II, F, 18.)Automatic Signal System in Locomotives (II, F, 17.) Auxiliary Enterprise (II, A, 33)

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Barium Chloride (II, D, 22.)
Blast Furnace (II, B, 8.)
Bleaching Powder (II, D, 3.)
Branch Timber (II, D, 33.)
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Carbon Tool Steel (II, B, 27.)
Caustic Soda (II, D, 8.)
Coking Furnace (II, B, 11.)
Collective Control of Vehicles (II, F, 11.)

#### Korean Term

Ch'osan Aset'illen

Naesan, Naealk'ari Chep'um
Hapkumsok
Kyoryu
Yoman
Chilsan Ammonia
Yusan Ammonia
Yollyo K'alloriui Tunggaryang
Ungyong Hwahak
Choryon Chaeryoyong Injo
Suji

Chadong P'esaek Changch'i Ch'anae Chadong Sinho Changch'i Pojo Kiopso

Polmil
Yomhwa Paryum
Yonggwangno
P'yobaekpun
Ch'odumok
Kwanggwe

#### Konjae Kongop

Kibon T'ujawa Kibon Konsol Chabonjuuijok Kyongje Hyongt'ae T'anso Konggugang Kasong Soda Haet'allo Chadongch'aui Chipchung Kwalli

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### Korean Term

Kongopui Singminjijok P'yonp'asong K'omp'uressya

Kyonin Kyesan

T'ujaui Chipjung Sobijae Kk'ombeya Kulch'akki Sanhyonggang . Wonga K urassya Nongmin Kyongni Kyongji Myonjok Hyonhaeng Kyehoek Hwap ei Sunhwan Kigwanchi aui Kyonin T'uksong Kokson

Nodongui Cholyok Changbido P'ojon Chongni

Chingnyu Chipchung Susong

Nongop Hyopdong Chohapui Tagakchok Saengsan

Onje Epturon

Choryak Chedo Kunaeson Yuhyojang

Chon gi Kiguryu

Chon'gi Choryonp'um

Chon'gihwa Chon'gi Kyegiryu

Chollyok Kyet ong Chonhae Nungnyok Chonja Changch'i

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Industrial Crops (III, 12.)
Inflation (V, 8.)
Inorganic (II, D, 18.)
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Invention; Rationalization (II, A, 36.)
Irrigated Rice Paddy District (III, 5.)
Iron Works (II, B, 6.)

Kilowatt (II, C, 37.)

#### Korean Term

Kigwangu

Chagom Chasu
Hwaktae Chaesaengsan
Huksaek Kumsok
Sibi Ch'egye
Wanjep'um
Algok
Chup'asu

Kasuhwa Chamang Oop Ipch'ol P'urun Kori Chongsaengsanaek

Nakch'a
Yol Kwalli
Chunggongop
Keksahullorang
Koyolt'an
Kosoktogang
Maryok
Suryok Chijom

Kullojadului Pingunghwa

Tongnip Ch'aesanje

Tchehu Tongnip Chiaesanje

Kongye Changmul Inp'ulleson Mugisan Choryon Chiryu Palmyong, Hamnihwa

Mongni Kuyok

Chech tolso

K'irowatt'u

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Machinery, Equipment, and Supplies (II, A, 5.)
Machine Tools (II, C, 1.) Machine Tractor Stations (II, Magnetic Steel (II, B, 20.) Man-Day (VI, 1.) Mark (VI, 3.) Marshaling Yard (II, F, 25.) Means of Production (I, 3.) Measuring Instruments (II, C, 7.)
Mechanization (II, A, 10.) Medical Drug Industry (II, D, 7.) Uiyakp'um Kongop Metal Processing Industry (II, B, 21) Kumsok Kagong Kongop Metallurgical Industry (II, B, 4.) Methanol System (II, D, 6.) Method of Protection Through Carrier Application in the Electric Generation and Trans mission System (II, C, 31.) Mineral Extraction (II, B, 2.) Mineral Mining Industry (II,B,1.) Mixer (II, C, 6.) Monopoly Capital (V, 1.) Motive Force Control (II, A, 30.)

Narrow Gauge (II, F, 3.) National Capitalists (V, 7.) National Income (I, 7.) Nonferrous Metals (II, B, 16)

#### Korean Term

Nodongnyok Noryok Kwalli Nodong Seengsan Nungnyul Noryok Hubi T'oji Konsol Saop Kyonggongop Puha Kyoryangui Hajung Chogon Chibang Oop Yonsung Oop Choap Kiguryu

#### Kijajae

Kongjak Kigye Nonggigye Imgyongso Chasokkang Kongsu -Marukka Choch a jang Saengsan Sudan Chiukchong Kigu Kigyehwa Yagum Kongop

Met anol Kyet ong Palsongjon Kyet'ongui Pansong Chollyue Uihan Poho Pangsik

Ch aegwang Kwangsok Chiaegurop Miggisya Tokchom Chabon Tongnyok Kwalli

Hyopkwe Minjok Chabonga Kukmin Soduk Yusaek Kumsok

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Open Hearth (II, B, 9.)
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Organization of Labor (II, A, 27.)
Organization of Production
(II, A, 18.)
Organization of the Labor
Force (II, A, 25.)

Packing (II, C, 8.) Panel Construction (II, D, 28.) Panic (V, 3.) Passage Capacity (II, F, 6.)
Pass Ticket Lock-out (II, F, 19.) People's Economy (I, 12.) Percent Net Recovery Rate (II, A, 13.)Phosphate Fertilizer (II, D, 11.) Pig Iron (II, B, 12.) Planning of the National Economy (I, 17) Planted Land Area (III, 4.) Plastic Products (II, D, 20.) Power Generation and Transmission (II, C, 14.) Power Plant (II, C, 9.) Power Ratio (II, C, 33.) Power Transmission and Distribution Network (II, C, 13.) Precedence of Electrical Power Production (II, C, 32.)

#### Korean Term

Pisaengsanjok Konsol

Pisaengsanjok Chich'ul

Sobi Kijun Chadongch'aui Taesu Paech'aje

Taesang Solgye
Kosonmok
P'yongno
Sigong Solgye
Unyong Hyoyul
Unjon Solbi
Son'gwang
Yugijil Piryo
Nodong Chojik
Saengsan Chojik

Noryok Chojik

P'akk'ing
P'anelsik Kujo
Konghwang
T'onggwa Nungnyok
T'ongp'yo P'esaek
Inmin Kyongje
Silsuyul

In Piryo
Sonch'ol
Inmin Kyongjeui
Kyehoekhwa
P'ajong Myonjok
P'ullasut'umas Chep'um
Palsongjon

Palchonso Yongnyul Songbaejonmang

Chollyok Saengsanui Sonhaengsong

Precious Metals (II, B, 18.) Prefabricated Building Materials (II, D, 27.)Preparatory Processes in the Production of Goods (II, A, 32.) Priority Development of Heavy Industry (II, A, 3.)
Private Lines (II, F, 32.) Private Production (I, 31.) Production Area (II, A, 22.) Production Level (II, A, 20.) Prospective Plan (I, 18) Prospective Population (I, 20.) Production Potential (II, A, 21.) Production Realtions (I, 2.) Productive Construction (IV, 2.) Productive Domestic Animals (III, 13.)Productive Power (I, 1.) Profile (V, 4.) Pulp (II, E, 3.)

#### Quenching (II, B, 29.)

Rail-borne Cargo Circulation (II, F, 4.)
Rare Metals (II, B, 17.) Reagent (II, D, 2.) Real Wage (I, 24.) Reconstruction (IV, 5.) Relay Transport (II, F, 9.) Renovated Farm Implements (III, 9) Repair Base (II, F, 26.) Research for Trial Manufacture (II, A, 37.) Resistance Line (II, C, 27.) Rolled Steel Material (II, B, 22) Rolling Stock Park (II, F, 1.) Rolling Stock Turnaround Time (II, F, 5.) Rotary Furnace (II, B, 10.) Round Bar Steel (II, B, 26.)
Running Efficiency (II, F, 21.)

#### Korean Term

Kwigumsok Choripsik Konjae

Chep'um Saengsaneso
Chunbi Kwajong
Chunggongopui Usonjok
Changsog
Chonyongson
Sajok Saengsan
Saengsan Myonjok
Saengsan
Chonmang Kyehoek
Chonmang Ingu
Saengsan Yebi
Saengsan Kwangye
Saengsan Konsol
Saengsan Kach'uk

Saengsan Nyok Ppurohwil Palpiu

#### Sogyong

#### Ch'oldo Hwamul Sunhwan

Huigumsok Siyak Silchil Imgum Kaegon Yongye Susong Kaeryang Nonggigye Suri Paja Sijak Yongu

Chohangson Abyon Kangjae Hwach'a Pparuku Hwach'a Hoegwi Ilsu

Hoejollo Hwan'gang Unhaeng Hyoyul

Scale of Production (II, A, 19.) Scope of Construction (IV, 4.) Semiconducting Materials (II, 0, 26.) Semi-Finished Product (II, A, 7.) Semi-Socialist Management System (I, 28) Shore Protecting Forests (II, D, 31) Sidings in Station Compounds (II, F, 14)Silicon Organic Insulating Materials (II, C, 25.) Silicon Steel Sheet (II, B, 28.) Slag (II, B, 14.) Slates (II, D, 30.) Slow Passage Points (II, F, 20) Small Commodity Economic System (I, 30.)Smelter (II, B, 7.) Socialist Industrialization (II, A, l.) Socialist Transformation of the Agricultural Economy (III, 1.)Source of Labor (I, 25.) Source of Repair (II, F, 27.) Spans of Steel Bridges (II, F, 35.) Special Steel Materials (II, B, 23.) Stability and Consolidation of Currency (I, 16.) Standard Design (IV, 6.) Standardization of Accessory Building Materials (II, D, 29) Standard, Standardization (II, A, 9.) Standard Specifications, Standardization of Specifications  $(II, A, Il_{\bullet})$ Staple Fiber (II, E, 5.) State Accumulation (I, 8.) Steel (II, B, 13.) Steel Works (II, B, 5.)

#### Korean Term

Saengsan Kyumo Konsol Kyumo Pandochie Chaeryo

Panjep'um
Pansahoejuuijok Kyongni
Hyongt'ae
Hoallim

Yok Kunae Chiukson

Kyuso Yugijil Choryonmul

Kyuso Kangp'an Surak'u Suret'u Sohaeng Kaeso So sangp'um Kyongje Hyongt'ae Cheryonso Sahoejuui Kongophwa

Nongch'on Kyongniui Sahoejuuijok Kaejo

Noryok Wonch'on Suri Wonch'on Ch'olgyo Kada

T'uksu Kangjae

Hwap'ei Anjongwa Konggohwa P'yojun Solgye Konsol Pujaeui Kyugokhwa

P'yojun, P'yojun, P'yojunh

Kyugyok, Kyugyokhwa

Sup'u'
Kukka Ch'ukchok
Kangch'ol
Chegangso

Subservient Capitalists (V, 6.) Sulfur Dioxide (II, D, 23.) Superphosphate of Lime (II, D, 12) Superstructure of Tracks (II, F, 33.) Synthetic Fiber (II, D, 4)

Synthetic Rubber (II, D, 5.) Hapsong Komu Synthetic Silk Rulp (II, E, 4.) Ingyon P'alp'u System of Socialist Economy Sahoejuuijok Kyongje Hyongt ae (I, 27.)

Technical Control (II, A, 24,) Technical Production, and Finanoial Plans (II, A, 4.) Technical Provisions (II, A, 23.) Technical Speed (II, F, 8) Technical Stations (II, F, 24.)

Telemetering (II, C, 17.) Textile Industry (II, E, 2.) Total Crisis of Capitalism (V, 2)

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Utility Coefficient of Production Capacity (II, A, 15.) Utilization Rate of Facilities (II, A, 16.)Unfinished Product (II, A, 8.) Value of Output of Commodities (I, 23.) Vinyl Acetrate (II, D, 24.) Vinyl Chloride (II, D, 21.) Volt (II, C, 35.) Volt Ampere (II, C, 36.) Morking Place (II, A, 35.)

#### Korean Term

Yesok Chabonga Aryusan Kasu Kwarinsan Sokhoe Solloui Sangbu Kujo

Hapsong Somyu

Kisul Kwalli Kisul Saengsan Chaejong Kyehoek Kisul Changbi Kisul Sokto Kisulyok Wonbang Ch'ukchong Pangjik Kongop Chabonjuului Chonbanjok Wigi Kyeryokch'a

Yongop Sotdo Tchehu

Saengsan Nungnyogui

Solbi Iyongnyul

Misongp um Sangp'um Saengsanaek

Ch'osan Pinil Yomhwa Pinil Polt'u Polt'u Ambbeya Chagopehang

#### I. GENERAL ECONOMY

#### 1. Productive Power (Saengsannyok)

Continuous existence of human beings calls for the production of necessary goods (food, cloth, shoes, houses, raw materials, etc.), and the production of these necessary goods requires not only the means of production but also a labor force to exercise these means. The combination of these two elements is called productive power. However, since the means of production too are produced by human beings who possess certain experiences and skills required for their production, the basic productive power of a society is constituted by the mass of laborers, with the working class being primary.

#### 2. Production Relations (Saengsan Kwangye)

At no time and under no circumstances can a man possibly produce a necessary article by himself, except through joint and collective social endeavour with others. For the production of desired articles, human beings have to be interrelated in a certain way. Thus human beings enter into certain relationships with one another for production. These very relationships are called production relations.

From the standpoint of human history, production relations among human beings develop only when comradely cooperation and mutual aid prevail (socialist society and the system of People's Democracies), or when relations between the rulers and the ruled or the exploiters and the exploited exist (salvery system, feudal system, capitalist society, etc.).

#### 3. Means of Production (Saengsan Sudan)

The labor force produces necessary articles by applying the tools of labor (machinery, equipment, buildings, railroads, etc.) to the objects of labor (raw materials, timbers, mineral ores, etc.) In this case, the objects of labor and the tools of labor together constitute the means of production.

The means of production are absolutely useless without human beings (labor force), and, conversely, production is feasible only when the means of production are utilized by human beings (labor force).

#### 4. Consumer Goods (Sobijae)

These are the goods required for the direct satisfaction of general needs of human life. These include, for example, food, cloth, paper and other necessities, as well as shelter and tools for general housekeeping.

#### 5. Labor Force (Nodongnyok)

In the science of political economy, labor force means, in the strictest sense of the term, the working capacity of human beings, i.e., the sum total of the physical and mental powers of human beings capable of producing food, clothing and shelter. But, in general, the term labor or working force (noryok) usually means manpower dapable of participating in productive activities.

#### 6. Expanded Reproduction (Hwaktae Chaesaengsan)

While human beings daily consume food, clothing and other goods, food, clothing and other things are being produced by human labor. As machinery is worn out through continuous operation, new machinery is constantly being built in the plants.

This continuous repetition and renovation in the production process is called [simple] reproduction.

But in order for a society to advance and make progress rather than remaining at a standstill, this reproduction has to be carried on in an ever-expanding scale. In other words, the output during a given month has to surpass the month immediately preceding, and the output during the following month has to outstrip that particular output during a given month. By the same token, the output during the following year has to be larger than the one for the present year. The reproduction which is thus carried on in an ever expanding scale is called expanded reproduction. It goes without saying that expanded reproduction calls for the establishment of more and larger plants and an expansion in the production scale.

#### 7. National Income (Kukmin Soduk)

National income is balance of the total output of domestically produced material goods (essential goods) after deducting the cost of the means of production (raw materials, fuel, buildings, machinery, etc.), incurred in producing that output for a given period, e.g., a year.

National income is expressed either in material or in monetary terms. In material terms, it includes first the total volume of consumer goods made available to individuals and of the means of production produced for the expansion of production. Expressed in monetary terms, national income means the total monetary value of output newly created in a given year. For example, if the total output in a given year is valued at 100 billion won and the value of the means of production consumed in producing that output is 50 billion won, national income for that year is 40 billion won.

#### 8. State Accumulation (Kukka Chiukchok)

In general, the State saves part of the income from State enterprises and part of its tax revenues. These savings are called state accumulation. States in the socialist camp use this state accumulation to expand production, advance the material and cultural life of the people, strengthen national defense, and the like.

#### 9. Economization System (Choryak Chedo)

Under socialism and the people's democracies, the economization system is one of the methods of socialist enterprise designed to effect a greater return with less expenditure from various factors of production (such as labor, machinery, raw materials and supplies).

In other words, it includes all measures designed to increase labor productivity by saving labor, by systematically utilizing production tools, by saving the objects of labor (raw materials, supplies, fuel, electricity, etc.) and by saving money.

Under socialism and the people's democracies, the economization system serves not only the cause of all society but it also raises the living standards of the workers. Accordingly, its implementation is a mission for all people.

10. Independent Accounting System (Tongnip Ch'aesanje) [apparently is equated with the Russian term "Khozraschet" or economic accountability]

Independent accounting system is a method used to manage and operate socialist enterprises according to a plan. In other words, it is a method used by socialist enterprises to strengthen their accounting system, constantly to reduce the cost of production and to increase labor productivity.

For example, an industrial enterprise which has adopted this accounting system finances its production through the sale of its output, and the difference between revenues and costs constitutes a profit to the enterprise.

Therefore, if an enterprise after fulfilling its production plan, produces goods at less than cost, more profit will accrue to it, thus increasing the distributive share of the workers at the enterprise.

### 11. Independent Accounting System for Shops (Tchehu Tongnip Ch'aesanje)

The independent accounting system for shops is also called the internal independent accounting system for enterprises (kiopso naebu tongnip ch'aesanje), and is the accounting system used by individual shops.

As applied to individual shops, this accounting system does not mean that the shop has its own working capital, its own balance sheet, that it settles its accounts independently, or that it has the status of juridical persons. But it may set up a production cost plan and, within the limits of this plan, may independently mobilize materials and labor in the shop and make ['give' in the text] incentive (changnyo) payments to the members who achieved a certain savings.

As a result, the independent accounting system of shops gives a material incentive to the workers of an enterprise and, while integrating the interests of the workers with those of the entire society, facilitates internal accumulation within the enterprise.

#### 12. People's Economy (Inmin Kyongje)

The people's economy includes total production (including material production in industry, agriculture, capital construction, transportation, etc.), exchange (yut'ong), distribution and consumption.

#### 13. Cost (Wonga)

This is the cost of producing an article by a production workshop and all the costs involved in selling this article. It constitutes an all-inclusive index which expresses in money (currency) the economic activities of all undertakings related to making an article by a production workshop and to selling it.

There are two kinds of costs for industrial products: production cost (plant cost) and selling cost (also called total or commercial cost). Production cost involves [the cost of] (1) raw materials, basic and supplementary materials, (2) depreciation of machinery and tools, (3) wages and (4) other costs which go into the price of the article (administrative and management expenses, training expenses and losses for defective [goods]). The selling cost includes expenditures relating to the selling of products (expenses for scientific research, transportation and others) as well as the cost of production.

# 14. Non-Productive Expenditures (Pisaengsanjok Chich'ul)

In the cost of manufactured goods are included all expenses which are directly expended in the process of production (for raw and basic materials, fuel, electric power, and basic and supplementary wages) and expenses which are not directly related to the production process (for selling, training of cadres, factory administration and management, fines, damages for breach of contracts, arrearage charges and [charges for] storage of materials, [losses due to] inadequate inspection of semi-finished and finished goods and defective articles, and losses due to work stoppages). Expenditures which are not directly related to production are called non-productive expenditures.

### 15. Currency Circulation (Hwap'eui Sunhwan)

After receiving currency from the Central Bank (Chungang Unhaeng), plants, enterprises, organs and agricultural cooperatives disburse this money as wages to the laborers, office workers, farmers and cooperative members. They are also used for procurement loans, orelse they are distributed as shares of the cash income. Money so received is in turn spent by workers, office workers and farmers for the purchase of necessary commodities, and things such as train fare,

entertainment, and the payment of taxes, and the balance is deposited in banks.

Cash disbursed to workers and the people is thus returned to the Central Bank through commercial organs and other channels.

Once out of the Central Bank, which is the currency issuing organ and the center for cash disbursements and receipts for the people's economy, currency moves as a means of facilitating commodity circulation, as a means of payment and as a means towards savings until it returns to the Central Bank. This flow of currency constitutes currecny circulation. Several factors closely related to normal currency circulation which connote economic stability are the volume of currency available, particularly for commodity circulation, the velocity of circulation, cash income of the people, and balance between the supply and demand of commodities.

## 16. Stability and Consolidation of Currency (Ewap'eui Anjonggwa Konggohwa)

The currency of our country (Central Bank bills) is valued on the basis of a gold standard. This value is measured according to the quantity of goods which can be purchased with a certain unit of currency (e.g. one won), and constitutes the purchasing power of the currency.

If bank bills are issued in excess of the demand in the sector of commodity circulation, the purchasing power of the currency will decrease and the stability of currency cannot be ensured. However, if the bank bills are issued in the amount demanded and correctly represent the original amount of gold, the currency is regarded to have achieved stability.

If timely disbursement of cash is made according to the demand of various sectors of the people's economy and cash disbursed in wages and other ways is adequately absorbed by the State, then constant and smooth currency circulation is ensured; if a balance between cash income and spending and between supply and demand of commodities is maintained, currency is considered to be playing the role expected of it in the people's economy.

If labor productivity increases in the people's economy, the output of goods will increase and the cost of goods will decrease, thus reducing prices on the one hand and increasing the purchasing power of won on the other. As a result, the role of the currency is strengthened and currency circulation is more properly related to the demands of the people's economy. This means a consolidation of the currency.

Since the end of the Korean War, the currency of the Republic has been steadily stabilized and consolidated.

# 17. Planning of the National [Peoples] Economy (Inmin Kyongjeui Kyehoekhwa)

This means that the entire national economy is managed and developed according to the uniform plan of the State. The uniform plan established by the State to manage and develop the people's economy is called the plan of the people's economy. The plan of the people's economy envisages in advance the tasks of various sectors of the people's economy for a given period as to the kinds and quantities of goods to be produced, the machin ry and facilities to be installed or prepared for installation, the new enterprises to be established, the cultivated land area to be expanded, the extent to which labor productivity is to be raised, the extent to which the cost of products is to be reduced, the quantity of products to be supplied to consumers and the like.

#### 18. Prospective Plan (Chonmang Kyehoek)

Since the establishment of socialism and communism takes a long period of time, socialist countries or people's democracies strive towards their establishment through stages. One state of an economic plan comprises a number of years (generally five years), and this sort of plan is called a prospective plan.

Belonging to this category are our Three-Year Plan for the rehabilitation and development of the people's economy from 1954 through 1957 and the First Five-Year Plan from 1957 through 1961.

#### 19. Current Plan (Hyonhaeng Kyehoek)

Since the plan for the people's economy has to be realistic

and concrete, it is impossible to develop the people's economy systematically only on the basis of a prospective plan which is set up to take into account various factors anticipated during the years to come. Therefore, it is necessary to convert the prospective plan into concrete annual plans. An annual plan is called current plan. In other words, this is a plan which, while based on a prospective plan, envisages concrete and detailed indices for the execution of tasks evolving from these prospective plans.

A current (annual) plan is in turn subdivided into monthly and quarterly plans.

#### 20. Prospective Population (Chonmang Ingu)

This is the population anticipated in a given period with a certain population increase. The prospective population provides a basic foundation for the planning of the people's economy, for it is on this foundation that factors such as source of labor force, housing, construction of cultural facilities, expansion of the means of commodity supply and transport, and the demand for food are calculated.

#### 21. Labor Productivity (Nodong Saengsan Nungnyul)

Labor productivity is the ratio between the number of working hours and the goods produced or tasks performed during that period (e.g., time required for the production of a pair of shoes, or the number of pairs of shoes produced during a given time unit, e.g., one hour). For example, if the production of a pair of shoes, which required 60 minutes previously, now requires 40 minutes due to an improvement in technology, labor organization and labor discipline, it means that the labor productivity has increased 50 percent.

### 22. Gross Output [Value of] (Ch'ongsaengsanaek)

This is total monetary value of goods produced in a given period by each enterprise, by each sector of the people's economy, or by the entire people's economy. The gross output of an enterprise is the total monetary value of goods produced by that particular enterprise; the gross output of each sector of the people's economy is the total monetary value of goods produced by that sector (such as gross output of industry or gross output of agriculture).

# 23. Value of Output of Commodities (Sangp'um Saengsanaek)

This means the total prices at which commodities produced by enterprises have been supplied and sold or are expected to be sold.

#### 24. Real Wage (Silchil Imgum)

This represents the real value of wages or the extent to which workers, technicians and office workers can purchase goods or enjoy facilities with their cash income (monetary wage).

With the same amount of money, they can purchase greater or lesser amount of goods as prices decrease or increase. Therefore, the real value of the cash wages of workers, technicians and office workers can be calculated only by comparing them with prices of goods.

#### 25. Source of Labor (Noryok Wonch on)

This is also called source of labor reinforcement (noryok poch'ung wonch'on) or labor resources (nodong puwon). The source of labor lies in the sources of manpower with productive working capacities. In general, the source of labor includes local inhabitants, the work forces in agricultural communities which can be recruited without effecting farming, and auxiliary work forces (yebi noryok) formed in various sectors of the people's economy through the redistribution of labor.

#### 26. Labor Reserve (Noryok Hubi)

Labor reserve means organized workers who, though not currently participating in production, are expected to participate in the near future with a certain degree of skill in production and construction in industry, agriculture and other sectors of the people's economy.

At present, the labor reserve of our country includes trainees in various production and construction shops, students of technical schools at all levels, shop workers' schools (chikkong hakkyo) and workers' schools (nodongja hakkyo), and members of agricultural training classes (nongop posup panwon) in agriculture. It is clear, then, that the labor reserve has to be distinguished as being

different from those who are not yet working (mich iopja) or from the source of labor reinforcement which is very broad.

### 27. System of Socialist Economy (Sahoejuuijok Kyongje Hyongt'ae)

In accordance with the types of ownership of the means of production, of the management of production, and of the distribution and exchange of products, there are at present three different types of economies in the northern half of our country. They are the socialist economy, the small commodity economy (so sange um kyong je hyong t ae), and the capitalist economy.

The socialist economy is composed of two sectors; one being a sector of the State-operated economy and the other a sector of the cooperative-operated economy.

In the socialist type of economy, (1) the means of production are socially owned (all-people's ownership or cooperative ownership); (2) workers are liberated from exploitation and work through comradely cooperation and mutual aid; (3) production is carried on according to a plan under the leadership of the State and (4) the social product is distributed among the workers according to the quantity and the quality of their labor.

### 28. Semi-Socialist Management System (Pansahoe juuijok Kyongni Hyongt'ae)

In the northern half of the Republic, the agricultural cooperatives of the second type permit continued ownership by members of the means of production which they personally contributed at the time the cooperative was formed, and their members receive a distributive share not only according to the quantity and quality of their labor, but also to the service rendered by their own means of production although shares in the latter case may be very small.

This type of enterprise is transitional towards a type of socialistic enterprise, and in this sense, it is referred to as a type of semi-socialist enterprise.

29. Capitalist Economic System (Chabonjuuijok Kyongje Hyongt'ae

The Capitalist economic system is comprised of private

commercial and industrial enterprises in urban areas and the rich farmer economy in rural areas. This system (1) is based on capitalist ownership of the means of production, (2) employes hired labor which results in exploitative relationships, (3) makes impossible state, planned, and guided production, and (4) distributes the products of labor profitably to management.

# 30. Small Commodity Economic System (Sosangp'um Kyongje Hyongt'ae)

This economic system is comprised of the private agricultural economy in rural areas and private handicraft industry in urban areas. The private farmers and handicraftsmen have comparatively small private properties (means of production). They own the products which they have produced themselves and not by the exploitation of the labor of others.

#### 31. Private Production (Sajok Saengsan)

In private production, there are (1) large scale private ownership of the means of production, such as capitalist industrial and commercial enterprises and rich farmers agricultural enterprises which hire and exploit the workers for profit making purposes; and (2) small scale ownership, such as the handicraftsmen in urban areas and private farmers in rural areas who produce goods for income through their own labor without any exploitation of others.

Though the latter is different from the former in that it does not exploit others, it still has something in common with the former in that the means of production are privately owned and that the income (profit) from the production is monopolized. In this sense, both types of (production) are called private production.

# II. INDUSTRY with the till to the to a state of

### A. General

#### 1. Socialist Industrialization (Sahoejuui Kongophwa)

This is a means to develop socialist industries (industrial enterprises of the State and industrial enterprises of the ocoperative organs), to reorganize capitalistic and private industrial enterprises into socialistic industries, and to develop national industries not only to the level of advanced industrial power, but also to a level at which industry plays a decisive role in the people's economy.

The primary prerequisite to socialist industrialization is the development of heavy industries which produce the means of production and, in particular, the primary development of machine building industries to supply modern machinery and equipment to all sectors of the people's economy.

#### 2. Heavy Industry (Chunggongop)

This refers to industries which produce such means of production as metal, coal, lumber, machinery, equipment and others, and these products are in general consumed in the production processes. Included as heavy industries are the metal industry, the machine industry, the power industry, the coal industry, the chemical industry, the building materials industry, and the forestry industry, etc.

#### 3. Priority Development of Heavy Industry (Chunggongopui Usonjok Changsong)

Without the development of heavy industries, the supply of machinery to light industries such as the textile industry, the food processing industry and other industries producing necessity goods cannot be ensured. Also, without the development of heavy industry, tractors, combines and other farm implements cannot be supplied to the farmers; hence there would be no agricultural development.

Without heavy industry developed to a considerable degree, modern weapons cannot be supplied to the armed forces; national defense cannot be strengthened, and the country cannot be defended against invasion by imperialists.

To supply the means of production to industries such as the metal industry, the machine industry, the power industry and the coal industry, the development of heavy industry should be strongly emphasized.

The development of heavy industry is, therefore, highly important to the development of various sectors of the people's economy, to the advancement of welfare of the people, and to the maintenance of national independence.

# 4) Technical, Production, and Financial Plans (Kisul Saengsan Chaejong Kyehoek)

Planned tasks envisaged and forwarded by the Ministries and Bureaus to individual enterprises on the basis of the over-all plan of the people's economy are in turn adopted by enterprises into various concrete plans for the effective execution of the given tasks. These plans of the enterprises are called the technical, production, and financial plans.

In other words, the technical, productive and financial activities of the enterprises are comprehensively planned and are based on the goals prescribed by the State plan. They provide the technical-economic computations and the organizational and technical measures needed to insure success through the participation of all the workers in an enterprise. Technical, production, and financial plans consist of the following:

- (1) Production program (production plan);
- (2) Labor plan;
- (3) Technical plan;
- (4) Machinery and equipment supply plan;
- (5) Production cost plan;
- (6) Financial plan; and
- (7) A plan providing for the organizational-technological measures to be taken for the execution of the above goals.

The most important part of the over-all plan is the production program; the other items serve for the efficient execution of the production program.

#### 5. Machinery, Equipment and Supplies (Kijajae)

These refer to material factors such as raw materials, fuels, supplies, machinery and equipment required in various sectors of the peoples economy. Machinery, equipment and supplies are also called technical-supplies (kisul-chajae).

#### 6. Finished Product (Wanjep'um)

This refers to a product which has undergone all the required productive and engineering processes, while satisfying various engineering requirements and standard specifications or specifications provided in a contract; it is capable of being sold to purchasers.

### 7. Semi-finished Product (Panjep'um)

This refers to a product which requires further processing or processings by another shop or enterprise after initial processing or processings have been completed in a shop or enterprise.

For example, if a textile mill with a thread and textile shop, turns over the thread which has been processed through the thread shop to the textile shop for the production of textiles, that thread is called a semi-finished product.

### 8. Unfinished Product (Misongp'um)

This refers to a product which still requires further processing in the same shop of enterprise. It may still be in the state of being processed in a machine or it may be in a workshop awaiting further processing.

### 9. Standard, Standardization (P'yojunhwa)

The standard of a product refers to a standard (kyugyokjok) model for products which satisfies the prescribed norm for products as to quality, chemical content, physical attributes, shape, size, weight etc. Standardization refere to the integration of supplies, products and parts according to the most systematically prescribed norm. Standardization promotes improvement of the quality of products, creates conditions required for the introduction of mass production and, at the same time, further promotes the campletion of technological and engineering processes and the economization of working hours.

#### 10. Mechanization (Kygyehwa)

This refers to the broad application of machinery to the production of goods in all sectors of the people's economy.

Mechanization is the decisive factor in increasing labor productivity and is a means to technological progress, for it substitutes human labor with mechanized labor, thus reducing and economizing on the labor of the workers.

## 11. Standard Specification, Standardization of Specifications (Kyugyok, Kyugyokhwa)

Standard specification (kyugyok) refers to a certain standard (p'yojun) of quality, including shape, size, weight, color, etc., and the totality of these standards (p'yojun) is referred to as standardization of specifications (kyugyokhwa)

In meaning it is similar to that of standardization (p'yojunhwa).

#### 12. Gasification (Kasuhwa)

It refers to the broad application of gas in various fields of production and in the daily activities of the people.

Use of gas in industries and in the daily lives of the people is very broad in scope, and includes the generation of power, uses in engineering processes, and use for lighting purposes, heating and cooking among urban residents.

#### 13. Percent Net Recovery (Silsuyul)

Percent net recovery refers to the extent to which useful contents in ertain materials are actually exploited and utilized, and this value is expressed as a ratio between the amount exploited and the amount of the material recovered.

For example, when the godl content in a gold ore is 100 and the amount of gold recovered through ore processing is 50, the percent net recovery of gold is 60 percent.

#### 14. Electrification (Chon'gihwa)

This refers to the broad use of electric power in all the sectors of the people's economy and in all walks of human life.

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Electric power is used to produce motive power, for technical processes and for lighting purposes.

Electrification is an indispensable requirement in improving working conditions and in increasing labor productivity, it facilitates the automation of work, reduced the labor of workers and provides sanitary working conditions.

## 15. Utility Coefficient of Production Capacity (Saengsan Nungnyogui Lyong Kyesu)

Utility coefficient of production capacity is the index representing the extent to which production capacities of machinery or the like can be utilized. All machines have a certain production capacity. But under actual conditions of operation (skill level of the workers, machinery maintenance conditions, efficiency of machinery, working conditions, natural conditions, etc.), production capacity of these machinery cannot be utilized to the fullest extent. As a result, it is necessary to determine only the extent to which the production capacity of machinery can be utilized by taking into account all the varying conditions.

#### 16. Utilization of Facilities (Solbi Iyongnyul)

This refers to the degree to which the capacity (songnung) of machinery, working tools, buildings and other assets is actually utilized in the course of production. The utilization rate of facilities can be considered from two aspects. One is to consider to what extent in a given time certain machines are utilized, in comparison with their capacity for production; the other is to consider how long these machines are utilized relative to the expected life of the machinery.

However, the most common meaning of the utilization rate of facilities is the rate at which the machinery is utilized in a given time in comparison with its capacity. For example, if a certain set of machines, with the capacity to produce 100 pieces of certain types of goods in 8 hours, produces 80 pieces during the same period of time, the utilization rate of facilities [machine] is 80 percent.

However the utilization rate of facilities must not be confused with the rate of operation of machinery (kigyeui kadongnyul). Irrespective of output, if a machine is operated for eight continuous working hours without trouble, the rate of operation of the machine is 100 percent. However, if that machine produces 70 percent of a product despite the rate of operation being 100 percent, the utility rate of facilities is still only 70 percent.

An increase in the utilization rate of facilities allows greater output with the same facilities, without supplementary investment by the State [in additional machinery].

#### 17. Norm of Consumption (Sobi Kijun)

It refers to the quantity of raw materials, fuel, supplies and electricity required for the production of a unit product.

For example, the quantity of leather required for the production of a pair of shoes or the quantity of cotton thread required for the production of one meter of cotton fabric constitutes the norm of consumption. Strict observance of the norm of consumption and the establishment of advanced norms are important means of preventing waste in raw materials and supplies and of reducing the cost of products.

#### 18. Organization of Production (Saengsan Chojik)

This refers to the organization of a series of tasks for the effective implementation of production plan.

Basic to the organization of production are the organization of engineering processes, the organization of labor, and the organization of the flow of raw materials and supplies.

Organization of production is the basic factor controlling the productivity of an enterprise.

#### 19. Scale of Production (Saengsan Kyumo)

This scale is determined by the volume of production, the gross output and output of goods, the capacity of production facilities, and the number of employees. The scale of production varies in magnitude among the different sectors of the people's economy and enterprises because of their individual characteristics.

#### 20. Production Level (Saengsan Sujun)

This is a comparison of the total value of production (by group or by specific commodity) in one specified period of time with that in another specified period of time. For example, let us suppose that the 1956 level of production reached 110 percent in January 1956. In this case 110 percent becomes the level reached by the actual results achieved during the 12 month period from February 1955 to January 1956 as compared with the 1956 plan.

The level can also be determined by comparing real production in [different] specific periods of time. For example, the relative gain derived by comapring 1955 results with those of 1954 correctly becomes the [new] level. However, the comparison derived from comparing actual output with planned output for 1956 is not the level.

#### 21. Production Potential (Saengsan Yebi)

This refers to all reserves which can be mobilized to increase productivity. Production potential is revealed the course of utilizing facilities, raw materials, supplies and the labor.

Production potential is divided into the following three categories:

- (1) Current potential Potential created by completely eliminating waste and by making use of capacity potential utilized during the preceding planned year.
- (2) Future potential Potential envisaged in an annual plan or long range plan on the basis of experience and also after(a thorough scrutiny of the contemplated effectiveness of a plan on the basis of the organizational-technological measures to be taken.
- (3) Latent potential Potential related to further scientific and technological progress and that pending the complete establishment of productive, organizational and working methods. Precise measurement of latent potential is impossible, but this potential has to be studied and understood at least to a general extent since it is highly significant in increasing productivity.

#### 22. Production Area (Saengsan Myonijok)

This refers to an area occupied by machinery and other productive facilities. This is one of the most important indices in measuring production capacity.

A decrease in the unit production area is an important factor in ensuring a reduction in unit construction cost, in facilitating plant management, in economizing on labor and in increasing labor productivity.

#### 23. Technical Provisions (Kisul Changbi)

These refer to the introduction and installation of machinery, equipment and tools.

Technical provisions provide a fundamental means towards the reduction of labor as well as providing higher productivity and a technical basis to facilitate socio-economic development. Achievement of technical provisions of higher standards are basic prerequisites to socialist industrialization.

#### 24. Technical Control (Kisul Kwalli)

This refers to a series of measures which ensure adherence to technological norms in the production of goods. For example, correct observance of standard working methods (p'yojun chojakbop) and machine operation procedures, assurance of correct engineering processes, the lifting of technological levels, and other control measures related to technological problems constitute technical control. Correct technical control is an indispensable factor in increasing the efficiency of machinery, in raising the technological level and the skills of workers, and in raising labor productivity.

#### 25. Organization of the Labor Force (Noryok Chojik)

In general, this refers to the correct distribution of the working force required for each productive engineering process in order to ensure the effective fulfillment of a production plan.

The organization of the working force has to be executed, as far as possible, by diverting workers from areas in which labor is in oversupply to areas where workers are needed,

by balancing the working forces between the direct and indirect sectors, and by comprehensively distributing workers according to sex as well as according to individual categories of workers such as technicians and common laborers.

#### 26. Labor Force Control (Noryok Kwalli)

This refers to the control of the entire operation related to the labor force, including the acquisition of the labor force required to execute production, the systematic coordination and distribution of the labor force, provisions for labor safety measures, the training of labor reserve forces, the strengthening of the labor front in organizing recreation for the workers and ensuring adequate housing and living conditions for the workers.

#### 27. Organization of Labor (Nodong Chojik)

Although the organization of labor has an inseparable relation to the organization of the labor force, its content is much broader than that of the latter.

The basic components of organized labor are as follows:

- (1) Systematic recruitment, training and enhancement of personnel skill levels.
- (2) Distribution of personnel, division of labor and cooperation among individual workers within enterprises;
- (3) Adequate organization of working places;
- (4) Improvement of services for working places;
- (5) Organization of working processes;

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- (6) Improvement of working conditions, labor safety measures, and technological levels;
- (7) Establishment of wage schedules and improvements in the material and cultural living standards of the workers;
- (8) Organization of socialist competition to raise the productivity of labor and to increase the output of industrial products.

## 28. Degree of Power Provision for Labor (Nodongui Chollyok Changbido)

The amount of electric power consumption per productive worker is called the degree of power provision for labor. The more mechanical and electrical power utilized in the

tasks, of labor the greater is the power consumption and the higher the degree of power provision for labor. Accordingly, modern industries have a very high degree of power provision for labor.

#### 29. Electric Power Control (Chollyok Kwalli)

This refers to the organization of a series of measures such as the operation, use, inspection and maintenance of electrical equipment to ensure the effective utilization of electric power, to prevent power failures or decreases in electric pressure, and to maintain a regular reliable power supply.

#### 30. Motive Force Control (Tongnyok Kwalli)

Motive force refers to the power source needed to operate machinery and other production tools; it includes electric power, steam, gas, etc. Motive force control then refers to a series of controlling measures to increase the effective utilization and maintenance of regular supply of the sources of power for operational processes.

#### 31. Heat Control (Yol Kwalli)

This refers to measures provided to ensure the maximum utilization of generated thermal energy. Observance of technological norms and the prevention of heat loss while thermal energy is being consumed and the protection of the heat transmission pipes constitute basic measures in heat control.

### 32. Preparatory Processes in the Production of Goods (Chep'um Saengsaneso Chunbi Kwajong)

These refer to a series of systematic arrangements to be made prior to initiating the production of goods. This becomes a very important problem especially when a new product is to be produced.

The preparations include designs or prescriptions (ch'obang) for specific goods to be produced, the establishment of production processes, the expenditure of labor, the productivity of facilities, the basic supplies and auxiliary supplies, the fuels and motive forces, all of which are objects to be taken into consideration in the establishment of technological and economic norms, and in the preparation of required tools,

equipment, machinery and facilities which are main components in established production processes. The degree of preparation prior to the production of goods is the fundamental factor conditioning the successes or failures in the execution of tasks in accordance with various indices given to an enterprise.

For example, in designing a new machine to be produced in the machine industry, the following processes have to be completed first:

- (1) Determination of technological tasks to meet the requirements of a specific design;
  - (2) Drafting of a skeleton design (yakdo solgye);
  - (3) Drafting of a technical design (kisul solgye); and
- (4) Drafting of an engineering design (kongjak solgye).

# 33. Auxiliary Enterprise (Pojo Kiopso)

This is an enterprise which, though not integral to the production of basic products (kibon saengsanmul), supplies various material implements required (production and supply of machine parts, maintenance tools and others) by basic production enterprises (kibon saengsan kiopso) for the normal production of basic products.

#### 34. Tsekh (Tchehu)

In general tsekh means shop. In principle, a tsekh produces a portion of the goods directly consumed within the larger enterprise to which it belongs or it executes a part of the process required in the production of finished goods.

Tsekh is the basic structural unit of an enterprise and is distinguished in terms of the following four categories:

- (1) Basic (productive) tsekh Concentrated here are the production processes which effect a qualitative change on the condition or shape of supplies being processed for transformation into finished products;
  - (2) Auxiliary tsekh This is a tsekh which does not directly participate in the production of basic products,

but does render certain required assistance to the basic tsekh during its normal operation. Belonging to this category are repair tsekh, machine tool tsekh, model tsekh, motive force tsekh, etc;

- (3) Service tsekh This is a tsekh which performs a service function for both the basic and auxiliary tsekh. Its services includes the supply of motive force, the transport of raw materials, and the processing of semi-finished and finished products, etc.
- (4) Supplementary (by-product) tsekh This is a tsekh engaged in the utilization and reworking (kaejak) of rejects produced during the course of basic production by the basic tsekh.

### 35. Working Place (Chagopchang)

This refers to a place where individual operations are performed in the production of goods or where production processes are being executed with the aid of appropriate facilities like tables, (working tables) stands (tae), and equipment.

A working place, may contain only a single worker or it may include a group of workers engaged in their tasks. Furthermore two or more working places may be served by a single worker (i.e., multi-machine set operation) (tagidae chakop).

### 36. Invention, Rationalization (Palmyong, Hamnihwa)

An invention is either a newly designed machine or article, or a new technique discovered through research.

Rationalization refers to research and the application of effective methods in the distribution of the working force, in the organization of enterprise, in the utilization of production tools, and in the execution of engineering processes.

### 37. Research for Trial Manufacture (Sijak Yongu)

This refers to all research directed towards the production of new products for experimental purposes beginning from the design to the attainment of certain positive results through trail manufacturing. In other words, on the basis

of a design, one or two sets of machinery are produced, and when flaws either in design or in the manufacture of them are detected they are corrected. Thereafter the new article is incorporated into a production plan to mitiate regular production. A whole series of these processes may be called research for trial manufacture.

#### B. Metal Industry (Kumsok Kongop)

#### 1. Mineral Mining Industry (Kwangsok Ch'aegurop)

This refers to the industry specializing in the mining of mineral ores containing metallic elements.

Like the coal industry this is an industry belonging to the extraction industry category (chiaech'i kongop).

#### 2. Mineral Extraction [Mining] (Chiaegwang)

This refers to the mining of minerals.

Mineral extraction includes boring into the earth, blasting for minerals and the operation of transporting these excavated minerals. Mineral mining includes the following mining methods: a method of mining from below upwards (the method of upward slicing mining) (sanghyang kyedansik ch'aegulbop); a method of mining from above downwards (the method of downward slicing mining) (hahyang kyedansik ch'aegulbop); and a method of mining simultaneously the walls of both the inner and outer working places along the gallery (the method of shrinkage) (syuring-gyejibop). The most useful and widely used methods in our country are the upeard slicing mining and the shrinkage methods.

#### 3. Ore Dressing (Son'gwang)

This refers to an operation carried out to separate and select the most useful minerals contained in ores.

A dressing operation is carried out in two stages: crushing and concentration.

There are a variety of ore dressing methods such as manual selection (suson), gravity concentration (pijung songwang), magnetic separation (charyok songwang), concentration through flotation (puyu songwang) and electrostatic separation (chongjollyok songwang).

#### 4. Metallurgical Industry (Yagum Kongop)

This is an industry specializing in the recovery of metals or the production of alloys from ores containing metallic elements.

#### 5. Steel Works (Chegangso)

This is an industrial enterprise producing steel. The main facilities in the steel works are open hearth furnaces, electric furnaces, rotary furnaces (hoejollo), gas producers (kasu palsaengno) and transformer stations.

#### 6. Iron Works (Chech tolso)

This refers to an industrial enterprise producing pig iron. The main facilities are blast furnaces, sintering furnaces (sogyollo), air heating stoves (yolp ungno) and coke ovens.

#### 7. Smelter (Cheryonso)

This is an industrial enterprise exclusively engaged in the production of non-ferrous metals (yusaek kumsok), rare metals, precious metals, etc. The main facilities are distributive roasting facilities (paeso solbi), blast furnaces (lead balst furnace, copper blast furnace), electric furnaces (chollo), and electric smelting and by-product facilities.

#### 8. Blast Furnace (Yonggwangno)

This is a facility to smelt iron ores. It has a capacity of about 700 cubic meters, and it is tapped for pig iron six times a day, producing approximately 500 tons daily.

It stands vertically, and while its exterior is made of iron plate, its inner wall is built with refractory bricks. Raw materials and fuels are fed from the top of the furnace, and ore is smelted by blowing [air at high pressures] into the furnace. Such air is pre-heated in air heating stoves and blown through a tuyere hole at the base of the furnace.

In addition to furnaces which smelt iron ores, there are also copper blast furnaces and lead blast furnaces.

#### 9. Open Hearth (P'yongno)

This is the main facility utilized to produce ordinary steel (soft steel). It is characterized by its high productivity. It is rectangular in shape with almost equal width and height and its length is about three to four times the width or height. The open hearths are heated with gas. Generally, the open-hearth is tapped twice a day, with a production of more than 100 tons per heat.

#### 10. Rotary Furnace (Hee jollo)

This is the main facility used in the production of granulated iron, cement and lime. Anthracite coal is used for fuel. The rotary furnace is cylindrical in shape and installed at an angle of two degrees. Its length is about 60 meters and it rotates about once in every two minutes. The rotary furnace is a facility which is particularly suited to the treatment of large volumes of material because of its ability to sustain continuous operation.

#### 11. Coke Oven (Haet'allo)

This is a facility which produces coke from high-calorie coal as the chief raw material. A coke oven is rectangular in shape:

#### 12. Pig Iron (Sonchiol)

This is a type of iron containing more than 1.7 percent of carbon and possesses low ductility (kadansong) (the capability of being cut). Primary raw materials for pig iron are iron ores and sintered ores, and the secondary raw materials are limestone and coke. When these raw materials are fed to the blast furnace and heated to approximately 1,500°C, they begin to flow out as molten iron, and this iron is called pig iron. Basically pig iron is distinguished according to its end use, such as pig iron for steel making, for casting, or for special use.

#### 13. Steel (Kangch'ol)

This is a type of iron which has less than 1.7 percent carbon and possesses ductility. Raw materials for steel

making are pig iron, iron scrap and granulated iron. When these raw materials are heated in an electric furnace or open hearth at approximately 1,600°C, impurities originally contained in them (such as silicon, phosphorus, sulphur and other non-ferrous metals) are eliminated, and steel is thus produced. Steel is used in construction, for machine building and tool making, and for many other purposes.

#### 14. Slag (Sullak'u)

This is a word of foreign crigin equivalent to "kwangjae" [slag] in Korean. In the process of smelting ores or metals, impurities other than metals or oxidized metals are separated and formed into layers. These are called slag.

Slag is used in the production of various building materials (e.g., slag bricks) by processing it, or it may be used as a fertilizer together with phosphate.

## 15. Granulated Iron (Ipchfol)

This is a raw material used as a substitute for scrap iron in the production of steel and it is called granulated iron because its size is just about that of an azuki [red] bean. The raw material used primarily in granulated iron is the Musan concentrate (brown iron ore produced at the Musan Mine) and the secondary raw materials are anthracite coal and slags. When these three materials are mixed and fired (fusion temperature is approximately 1,400°C) in a rotary furnace, a mixture of slag and granulated iron is created. And when this mixture is cooled with water and broken up by a crusher (punswaegi) the slag and granulated iron are separated.

# 16. Non-ferrous Metals, Ferrous Metals (Yusaek Kumsok, Huksaek Kumsok)

In industry, metals are distinguished in terms of non-ferrous (colored) ferrous (black) metals according to the colors they bear. Non-ferrous metals include copper, lead, zinc, aluminum, magnesium, tin, molybdenum, gold, silver, etc.

Ferrous metals are iorn, manganese, cobalt, etc.

## 17. Rare Metals (Huigumsok)

These are constituents of special steels and include molybdenum, tungsten, titanium, indium, gallium, etc.

Rare metals are used in various types of electric and electronic equipment. The so-called "rare metal" is a nomenclature originating from past habits of thinking based on particular metals being very rare on earth and hard to exploit.

## 18. Precious Metals (Kwigumsok)

This, too, is a nomenclature derived from the past habit of considering certain metals, like gold, silver, and platinum, as very precious and valuable in terms of property as well as in terms of memetary standards.

Precious metals are those which are almost completely free from oxidation, tarnishing and corrosion, and constantly preserve their beautiful colors.

#### 19. Alloy Metals (Hapkumsok)

These refer to metals which are a mixture of two or more metals. At times, however, they may contain non-metallic elements such as silicon and carbon. Alloy irons are ferro-tungsten, ferro-silicon, ferro-chronium, etc. These are obtained by smelting the appropriate ores in electric furnaces. For example, for ferro-tungsten, the primary raw material is tungsten concentrate and the secondary raw materials are lime stone and coke.

## 20. Magnetic Steel (Chasokkang)

This refers to steel with magnetic attributes or qualities of a magnet and is used in manufacturing telephone receivers, electric phonograph pick-ups, and many types of electrical measuring equipment.

## 21. Metal Processing Industry (Kumsok Kagongkongop)

This is an industry specializing in the production of machinery and consumer goods through the utilization of metallic materials and supplies.

#### 22. Rolled Steel Material (Abyon Kangjae)

This refers to either a finished product or a semifinished product of steel processed through a rolling mill according to certain sizes and shapes. Rolled steel materials include steel materials used in construction angle steel, ("kongyonggang", flat bar steel, round bar steel, angle shapes, plate, medium sheet, thin sheet, etc.), and steel used in the production of operational and general tools.

#### 23. Special Steel Materials (T'uksu Kangjae)

These refer to either finished products or semi-finished products made of special steels. Special steels are made of steel with certain special elements added. According to the types of special elements added to steel, special steels are called manganese steel, chrome steel, nickel steel, etc. High speed steels, heat resisting steels, acid-proof steels (naesangang) and steel for military purposes are all types of special steels.

#### 24. High Speed Steel (Kosoktogang)

These refer to either finished steel products or semifinished steel products made of ordinary steels with the addition of ferro-tungsten, ferro-chrome, ferro-vanadium, etc. This type of steel is used widely in manufacturing cutting tools which perform precision manufacturing and which cuts metals and other hard materials at high speeds. Examples are bits (pait) and drills.

#### 25. Angle Steel (Sanhyonggang)

These are ordinary steel materials processed through a rolling mill in the shape of the letter L.

Angle steel constitutes structural steel and this is widely used in capital construction. Examples are bridges and buildings.

#### 26. Round Bar Steel (Hwan gang)

These are steels processed through a rolling mill in round shaped sections. They are used in building materials, in the manufacture of medical equipment, etc.

#### 27. Carbon Tool Steel (Tianso Konggugang)

This type of steel contains more carbon and less impurities than ordinary steel.

Carbon tool steel is mainly used in the manufacture of cutting tools such as dies, drills, chisels and files (mainly used to work on soft steel).

#### 28. Silicon Steel Sheet (Kyuso Kangp'an)

This is a product made of ordinary steel with the addition of ferro-silicon (alloy iron), and is used in the iron ore found in various types of electrical equipment such as transformers, generators and measuring equipment.

#### 29. Quenching (Sogyong)

This refers to an operation performed to harden metals which have a transormation point (pyont aejom) (chiefly steel and some other metals). In other words, when the steel is heated up to an appropriate temperature, it is abruptly cooled either in water or in oil, thus changing the microstructure of the metal and increasing the hardness. This is one of the most important heat treating operations in the machine building industry.

## C. Machine Industry, Power Generation and Coal Industry

# 1. Machine Tools (Kongjak Kigye)

Machine tools are utilized to process and manufacture parts for machinery and equipment. There are such machine tools as turning lathes, sectile machines (tanjo kigye), cutting machines and polishing machines. Included are lathes, separators, planers, milling machines, hobbing machines, drilling machines, polishers, cutters, hammers and presses.

#### 2. Compressors (K'omp'uressya)

Compressors are air compressors (konggi apchiukki). They

provide an important facility to the operations at oxygen plants, chemical plants, mines, construction shops and machine plants. At a chemical plant they are used to cool or separate atmospheric elements; at an oxygen plant they are used to separate oxygen by compressing the air and at the mines and construction shops they are used to operate rock and other drills. Compressors are single stage or multi-stage. Single stage (ildan) compressors have a capacity of 7 to 8 atmospheres of pressure, while multi-stage (tadan) compressors produce up to several hundred atmospheres of pressure.

## 3. Conveyor-Excavator (Kk ombeya Kulch akki)

This is a type of equipment utilized both in digging and conveying earth or sand. This equipment is used mostly at construction sites and mines.

#### 4. Crushers (K'urassya)

These are equipment used to crush stones, There are Blake's crushers, "gyratory" crushers, hammer crushers, "cone" crushers and roll crushers.

Blake's crushers and gyratory crushers are used to crush large stones into medium stones; hammer crushers and "cone" crushers are used to crush medium stones into smaller ones; and roll crushers are used to crush stones into extremely small sizes.

#### 5. Ball Mill (Polmil)

This is a crushing machine used chiefly at mineral mines. After filling the drum ["baraban"] about halfway with iron balls and the other half with ore, it is rotated, thus crushing the ore with the impact created by the rotation.

#### 6. Mixer (Miggisya)

The mixer is a mortar mixing machine used to mix cement, water and sand.

#### 7. Measuring Instruments (Ch'ukchong Kigu)

These are instruments used to measure length, weight, time, angle, and size according to various requirements.

These instruments include galvanometers, pressure gauges, scales, compasses, rulers, etc.

#### 8. Packing (P'akking)

This is an inserting material used as buffer sealant and prevents friction. Frequently packing is used around the joints of pipes to prevent the leakage of water, oil, steam and air. In addition, it is also used around contact points when machinery and equipment are hastily installed. Packing materials are rubber, asbestos, fibre, paper, leather, etc.

#### 9. Power Plant (Palchonso)

This refers to a plant equipped with power generating facilities to generate electric power. Power plants are classified differently according to the source of motive power used to generate electricity. For example, there are hydropower plants utilizing water power (including tidal power plants harnessing the tidewaters), thermal-power plants utilizing coal, oil and gas, atomic power plants utilizing atomic energy, wind plants utilizing wind force, and solar power plants utilizing solar energy.

#### 10. Dyke Apron (Onje Epturon)

Apron is a word derived from foreign origin and means an "apch'ima" or an apron in Korean. But in the power industry, an apron refers to the base area where the water flowing over the reservoir dyke of a power plant drops. If a large volume of water overflows, the apron will be easily dug out by the impact of the fall and the dyke will collapse. For this reason, the apron has to be continually reinforced before the onset of each flood season.

#### 11. Direct Current (Chingnyu)

This is an electric current that flows only in one direction without an quantitative change. Direct current is generated by a DC generator and its voltage is in reality considered to be constant for a long time. If direct current electricity is used as the motive power, the starting torque (kidong hoejonryok) (force initiating the movement of machinery) is very strong and its speed can easily be controlled. For this reason, DC electricity is used in the operation of electric railroads as well as street cars and for electrolytic processes at electrochemical plants.

#### 12. Alternating Current (Kyoryu)

There are three kinds of electric current: alternating current, direct current and pulsating current (maengnyu). An alternating current changes constantly in value during the course of its flow and it also changes its direction periodically. The kind of electric current generated is determined in accordance with the construction of the generator. The electricity is most commonly used in homes and plants is that of the alternating type current.

## 13. Power Transmission and Distribution Network (Songbae-jonmang)

Power generated by power plants is supplied to consumers through transformer substations. In this system, the lines between power plants and transformer substations are called transmission lines, and those between transformer stations and consumers are called distribution lines. The sum of these transmission lines and distribution lines constitutes the power transmission and distribution network.

#### 14. Power Generation and Transmission (Palsongjon)

This is a collective term meaning both power generation (paljon) and power transmission (songjon). Power generation means the production of electric power by a generator utilizing a certain source of motive power, and power transmission means the transmission of power produced at the power plants through the transmission lines to transformer stations in the areas where it is consumed.

#### 15. Load (Puha)

Ordinarily "load" refers to the power delivered by a machine or the amount of work actually performed by a machine. In electricity, however, load means the demand of electric power for electric lighting, motive power, electric heating and so forth.

#### 16. Electric Power System (Chollyok Kyet'ong)

An electric power system refers to the interconnection of power plants, transformer substations, and the consumers with transmission lines of varying electric voltages. An electric power system is distinguished according to either the frequency of the electricity or the localities. Since the electricity used in our country is a uniform one of 60-cycles, all power plants and electric networks are interconnected by a single electric power system.

#### 17. Telemetering (Wonbang Chiukchong)

The measurement of a phenomenon or an object from a remote distance is called telemetering. For example, if electric current and voltage produced by generators at Sup'ung Power Plant are measured from the City of P'yongyang, such a measurement will be telemetering. This can be done by installing various metering implements in P'yongyang and connecting them with generators at Sup'ung through electric wires (also by radio communications). Although this has not materialized yet, it will in the future.

Telemetering has the advantage of rendering possible the execution of a systematic centralized control for the entire electric power system.

#### 18. Electric Metering Instruments (Chon'gi Kyegiryu)

These are the instruments used to measure various electric quantities. These instruments include wattmeters that measure the electric power, multiple wattmeters that measure the total electric power, voltmeters, that measure the voltage of electricity, amperemeters that measure the strength of electric current (amperage), wattmeters that measure the amount of ineffective electricity [reactive power] and power factor meters that measure power factors.

#### 19. Electrical Instruments and Tools (Chon gi Kiguryu)

In general, when we say "electrical machinery," we mean such large electrical machinery as generators, electric motors and transformers. And the rest are called electrical instruments and tools. They include switches, circuit breakers, electrical wire, sockets, ceilings, insulators, electric irons, electric heaters, electric ovens and many others.

#### 20. Low Voltage Instruments and Tools (Choap Kiguryu)

In general, electric voltage is divided into two categories: high voltage and low voltage. Low voltage refers to voltage lower than 250-volts, and the instruments and tools utilizing these voltages are called low voltage instruments

and tools. Electricity commonly used in homes have a voltage of 100-volts (hence low voltage electricity).

High voltage ranges between 250 and 3,500 volts; extrahigh voltage ranges between 3,500 and 220,000 volts; and ultra-high voltage (chiogoap) refers to voltages higher than 220,000 volts.

#### 21. Electronic Equipment (Chonja Changch'i)

Like vacuum tubes, the electronic instruments that release electrons for amplification, oscillation and many other purposes are collectively called electronic equipment. Examples are vacuum tubes (electronic tubes) used in radios and wireless transmitters, light generating bulbs used in projectors, and X-ray tubes used in roentgen. In addition to these vacuum electronic instruments, new crystals have been discovered recently that now play the role played by those electronic tubes of the past. Since the use of these crystals began as one type of electronic equipment, individual nomencletures such as "vacuum tubes" or "electronic tubes" to designate the whole of electronic equipment became inadequate as terms. Hence the beginning of the use of the term, "electronic equipment."

#### 22. Electric Insulating Materials (Chon'gi Choryonp'um)

There are materials such as metals, acids (sulphuric acid, hydrochloric acid, etc.) and alkali through which electricity is easily transmitted. There are also other materials through which electricity is hardly transmitted such as rubber, air, lumber, mica, glass and ceramic goods. To ensure economical use of power, to prevent any possible injury to human beings and to protect machinery in the course of power generation, power transmission and power consumption, certain insulating fixtures are installed. Materials used for these insulating fixtures (rubber, ceramics, mica, lumber, glass, etc.) are called electric insulating materials.

## 23. Artificial (synthetic) Resin for Use in Electric Insulation (Choryon chaeryoyong Injo Suji)

There are two kinds of resin; natural resin (pine resin, lacquer, natural rubber, etc.) and artificial resin. Artificial resin is made by chemically synthesizing various organic materials, and is also called "synthetic resin"

(hapsong suji). In modern industry, this is made of byproducts derived when coal and carbides are processed. Of the synthetic resins, those which are generally used in electric insulation. Examples are bakelite, vinyl chloride, artificial rubber, lacquer, etc.

#### 24. Insulating Paper (Choryon Chiryu)

These are papers that do not conduct electricity. These papers are more dense than ordinary papers and in addition contain certain insulating chemicals. These papers are used to wrap copper wires in coated cable lines or telephone lines.

## 25. Silicon-Organic Insulating Materials (Kyuso Yugijil Choryonmul)

These are insulating materials made of silica, anthracite coal, hydrochloric acid, alcohol, etc. Korea is potentially endowed to produce these materials. Silicon-organic insulating materials include silicone oil, silicone resin and silicone rubber. Silicone oil is used as a lubricant for rollers and airplane, for the production of insulating covering and paint, for abrasive resins. Silicone rubber is also used for the production of power line covering, belts, insulating tape, and other electric insulating materials. In comparison with other insulating materials, siliconorganic insulating materials have greater resistance to cold weather, heat and acid.

### 26. Semiconductor Materials (Pandoch'e Chaeryo)

Conductors of electricity, such as copper wire, allow electricity to flow in both directions. But some conductors allow electricity to flow either in one direction or, if it flows in the opposite direction it can transmit only a very weak current. These are called semi-conductors. Semiconductors are electrical materials made of substances such as copper oxide and selenium. Semiconductors are used in manufacturing rectifiers that convert alternating current to direct current.

#### 27. Resistance Line (Chohangson)

When an electric current flows along the conductor it collides with atoms constituting the conductor, and the flow of current thus encounters certain reactance. This

reactance is called resistance. Different materials render varying degree of resistance to electric current. Resistance lines are lines made of metals having great properties of resistance. When an electric current is passed through that line, it creates a great amount of heat by emitting the energy expended in overcoming the resistance encountered. It is due to the ease with which they generate heat that nickel-chrome and manganese wires are used in electric heaters and electric ovens.

## 28. Hydroelectric Power Site (Suryok Chijom)

This refers to a location where hydroelectric power can be generated. Hydroelectric plants are constructed where high heads or great differences between high and low tides (difference in levels between the high and low tides) exist.

#### 29. Head (Nakch'a)

This refers to the difference that exists between the water level of the reservoir and the water level of the drain at a hydroelectric power plant. Since hydroelectric power is generated by the rotating hydraulic turbines and generators that utilize the energy created by the water flow from high to low points, the term "head" is used to mean not only the difference between the two water levels but also the energy created in the course of that flow. Accordingly, "effective head" (yuhyo nakch'a), means the force of the water flow, i.e., energy, actually applied to turbines minus the energy loss incurred due to the resistance created by the walls of penstock pipes connecting the reservoir and turbines. The head is indicated in mgh.

### 30. Electrolytic Capacity (Chonhae Nungnyok)

This refers to the production capacity of electrolytic facilities. Electrolysis is applied to productive, analytical and experimental purposes in metallurgical, chemical and other industrial establishments. The electrolytic copper and electrolytic zinc derived respectively through the electrolyses of raw copper and raw lead have a purity of about 99.99 percent.

31. Method of Protestica Through Carried Application
in the Electric Generation and Transmission System
(Palsongjon Kyet'ongui Pansong Chollyue Uihan Poho
Pangsik)

The carrier current is a high-frequency current conducted simultaneously with the power electric current. Prevention of failures through the operation of various protective apparatuses (relays) in the power generation and transmission system with the aid of carrier current is called the method of protection through the carrier current in the power generation and transmission system.

## 32. Precedence of Electrical Power Production (Chollyok Saengsanui Sonhaengsong)

Electric power is indispensable to modern industry for the operation of machinery, the generation of power and for processes such as electrolyses. The need for power supply must first be warranted before a systematic distribution of productive power takes place within the people's economy. However, power production and its supply first calls for extensive capital construction of reservoirs, dams, power plants, transformer substations, transmission lines etc., which in turn necessitate the production of the machinery and equipment required. Accordingly, the construction of power generators and transmission facilities have to precede power consumption by a number of years, and this necessity to generate power prior to power consumption is called precedence of power production.

#### 33. Power Ratio (Yongnyul)

Of the total power generated by a power plant a certain portion is used in the actual performance of certain tasks, at the plant, and the rest becomes available for distribution. The proportion of power used in the actual performance of certain tasks at the plant to the total power generated is called the power ratio. Effective utilization of power has to be ensured always through proper maintenance of this power ratio.

#### 34. Frequency (Chup'asu)

A Frequency (cycle) is the number of changes per second in the flow of the alternating current. The frequency of electricity used in Korea is 60 cycles.

#### 35. Volt (Polt'u)

This is a unit of electric potential. Electric voltage is the force (potential difference ) that enables an electric

current to flow (just as water pressure is the force that enables water to flow).

Electric current (unit: ampere) flows along the conductor line while overcoming certain amounts of resistance (unit: ohm). One volt constitutes the potential difference which would enable an electric current of one ampere to flow along the line having a resistance of one ohm.

#### 36. Volt Ampere (Polt'u Smbbeya)

This is the unit indicating the rating of a generator. By multiplying the impressed electric voltage by the maximum electric current (ampere) capable of being generated by a generator, the generator rating (electric energy produced in a given time unit) is obtained.

### 37. Kilowatt (K'irowatt'u)

Like horsepower, "kilowtt" is a unit that measures the rate of work. One horsepower is equivalent to three quarters of one kilowatt, i.e. four-horsepower is equivalent to three-kilowatts. In general, the rate of work for machinery (e.g., locomotives and tractors) are indicated in horsepower, and that of generators and motors are indicated in kilowatts. Although the unit for measuring rate of electrical work has traditionally been the watt, the kilowatt unit which is 1,000 times as large as the watt is generally preferred to the latter which is too small a unit. One kilowatt-hour constitutes the amount of work performed to produce one kilowatt in one hour.

### 38. High Calorie Coal (Koyolt'an)

This is a type of coal having a heat content of more than 6,000 calories. It is used for production of coke or for the manufacture of gas, and for the operation of locomotives.

#### D. Chemical Industry, Building Materials Industry and Forestry

#### 1. Applied Chemistry (Ungyong Hwahak)

Chemistry is classified into basic chemistry and applied chemistry. Applied chemistry is the science which studies

various chemical problems such as the production of drugs, fertilizer, farm chemicals, metals and the prevention of metallic corrosion.

Ordinarily the term "applied chemistry" is used in the sense of "the chemistry of the chemical industry", and it, together with basic chemistry contributes to the development of the chemical industry.

#### 2. Reagent (Siyak)

One of a series of chemical compounds used to detect, measure, or examine certain materials according to chemical methods, because of their behavior in certain reactions.

#### 3. Bleaching Powder (P'yogaekpun)

"Bleaching" is a process that eliminates color through the alteration of pigments. Bleaching powder is a white powder that serves as a bleaching agent. It is prepared by the interaction of calcium hydroxide and chlorine. Bleaching powder is used to bleach fibers, fabrics and papers.

#### 4. Synthetic Fibres (Hapsong Somyu)

Synthesis is the process of making a compound from individual elements or a complex compound from simple compounds. The threads derived through the chemical method of composition are called synthetic fibers. Synthetic fibers are very strong, and their products vary according to the different raw materials used. Examples are nylon, caprone and alcohol fiber. The industrial production of synthetic fibers using carbide is expected in Korea.

#### 5. Synthetic Rubber (Hapsong Komu)

This is a collective term for all rubber-like materials resembling natural rubber in quality and characteristics. The raw materials utilized are carbide, petroleum, alcohol, etc., and in comparison to natural rubber, it has greater resistance to chemicals, heat, cold and deterioration.

#### 6. Methanol System (Met anol Kyet ong)

Methanol is methyl-alcohol. It is a system of the chemical industry specializing in the production of goods with methanol and is referred to as the methanol system. The production of plastic products belongs to this system.

## 7. Medical Drug Industry (Uiyakp'um Kongop)

In general, drugs are classified into pharmaceuticals, agricultural and other drugs. But in the public health sector, the production of therapeutic drugs, medical equipment and instruments are collectively classified as part of the medical drug industry.

#### 8. Caustic Soda (Kasong Soda)

Commonly called "yangjaenmul" in Korean. It is a white solid, absorbs water easily and is readily soluble in water. It is produced by passing an electric current through salt water.

Because of its easy penetration into fabrics, skin and paper, caustic soda is used widely to make soaps. It is also used in the production of paper and artificial silk.

### 9. Lime Nitrogen Fertilizer (Sokhoe Chilso Piryo)

This is a chemical fertilizer containing a large amount of nitrogen, which is one of the three basic elements to be found in fertilizers, and also a considerable amount of lime.

This fertilizer prevents the oxidation of soil and facilitates the growth of roots in farm crops. Since this fertilizer also releases a great deal of heat, it should not be applied during the period when the crops are growing.

#### 10. Organic Fertilizers (Yugijil Piryo)

Usually they are compost, stable manure (kubi) and greenmanure (nokbi). In some localities they also include peat (t'ot'an), "nit'an" and riparian clays used as fertilizers. Organic fertilizers contain various fertilizer elements such as nitrogen, phosphate and potash.

#### 11. Phosphate Fertilizer (In Piryo)

This is a fertilizer with a large phosphate content which is one of the chief elements to be found in fertilizers (the other two are nitrogen and potash). Phosphate is indispensable for the reproduction of plant cells and is used mainly in the cultivation of industrial crops (such as cotton, tobacco and flax).

#### 12. Superphosphate of Lime (Kwarinsan Sokhoe)

This is one of the phosphate fertilizers and contains 15 to 18 percent phosppate.

Commonly called "kwasok" [as an abbreviation], it facilitates the ripening and efflorescing of crops and promotes sound fruition. As a result, it is used mostly in the cultivation of industrial crops.

#### 13. Ammonium Sulfate (Yusan Ammonia)

This is a chemical fertilizer commonly called "yuan" [in abbreviated form], it contains about 20 percent nitrogen. It facilitates the growth of crops and is used for both subsoil and surface fertilization.

#### 14. Ammonium Nitrate (Chilsan Ammonia)

Commonly called "chilan" [in abbreviation form]. This is a chemical fertilizer with a 33 to 35 percent nitrogen content and is better, as a nitrogen fertilizer, than ammonium sulfate.

Since this fertilizer has explosive characteristics and is highly deliquescent, it is better to use it in combination with other fertilizers.

#### 15. Ammonium Chloride (Yoman)

This is an abbreviation of "yomhwa" ammonium [ammonium chloride]. Since it has about a 17 percent nitrogen content, it is chiefly used as a fertilizer. However, it is also used for the production of batteries and drugs.

#### 16. Hexachloran (Keksahullorang)

This is used mainly as an agricultural chemical and can be sprayed on fields either as a powder or in liquid form diluted with water. In Korea, 12 percent hexachloran is used. When seeds are treated with this chemical, they are protected from harm caused by noxious pests. It is also used in the public health service as a disinfectant as well as an insecticide.

# 17. Acid-Resistant and Alkali-Resistant Products (Naesan, Naealk'ari Chep'um)

These are products having great resistance to acids and alkalis and do not corrode in these solutions. Examples are acid-resistant cast iron and acid-resistant alloys used in acid-tresting facilities as acid-resistant kilns, pipes and pumps. Glassware and ceramic ware which are acid-resistant and alkali-resistant are used in acid and alkali production.

#### 18. Inorganic Acid (Mugisan)

Just as all matter is classified into organic and inorganic materials, acids are also classified as either organic or inorganic.

Acids such as sulfuric acid, hydrochloric acid and nitric acid that do not contain carbon are called inorganic acids.

Inorganic acids are used widely in the chemical industry. Sulfuric acid and hydrochloric acid are the raw materials used in the production of ammonium sulfate and ammonium chloride.

## 19. Acetic Acid (Chiosan)

This is obtained by vacuum distillation of wood or from acetylene. It is sour tasting. When an hydrous acetic acid is cooled, glacial acetic acid (pingch osan), which looks like ice, can be obtained.

Acetic acid is used for the production of high-grade artificial silk threads, aromatic products and photographic film, and its diluted solution vinegar is widely used for seasoning foods and for preserving vegetables and fish.

## 20. Plastic Products (P'ullasut'umas Chep'um)

A plastic is a material that has plasticity; plasticity is a quality that enables a material to be formed with the application of external pressure and which retains its formed shape without returning to its original shape when the application of that pressure is terminated.

This is a material which can be cast with machines or molded into any shape desired at high temperatures, and

because of its great insulating properties and its resistance to chemicals, it is used in the production of sockets, soap cases and many other products.

Products made of this material are called plastic products, and representative products are bakelite, celluloid and many others.

#### 21. Vinyl Chloride (Yomhwa Pinil)

Vinyl chloride is obtained when hydrogen chloride reacts with acetylene (which is obtained by the action of water on carbide) and is aided by an adequate catalyst (reaction accelerating agent). It is a gas from which synthetic resin is obtained.

Since vinyl chloride products have a great resistance to sulfuric acid, caustic soda, etc., they are widely used to coat the inner walls of pipes and containers. They are also used for the production of synthetic leather and transparent reincoats.

#### 22. Barium Chloride (Yomhwa Paryum)

This is made from barite, charcoal and calcium chloride. It is a white solid and easily dissolves in water.

Barium Chloride is widely used in the pottery, leather, drug, sugar refining and the textile industries.

#### 23. <u>Sulfur Dioxide</u> (Aryusan Kasu)

This gas can be obtained by burning either sulphur or the yellow ore produced in the Tanch on region, Hamgyongnamdo.

It is a colorless and irritating gas; vegetation near the plant producing this gas usually withers away.

This gas is used to produce sulfuric acid, which provides the raw materials for ammonium sulfate, and for bleach silk and woolen fabrics.

#### 24. Vinyl Acetate (Chiosan Pinil)

This is obtained through the reaction of acetic acid with acetylene (which is obtained by the action of water on calcium carbide) aided by an appropriate catalyst.

This is a colorless liquid and is used as a raw material in the production of synthetic resins and fibres.

#### 25. Acetylene (Aset'illen)

This is a gas which is formed when water reacts with calcium carbide. When it is used for illuminating purposes, the flame is produced by acetylene. When this gas is mixed with oxygen and burned, it releases very high temperature. For this reason, its flame is used to weld and cut sheet metals. Acetylene is one of the important raw materials used in synthetic industries.

#### 26. Building Materials Industry (Konjae Kongop)

This is an industry specializing in the production of building materials and accessories on a large scale.

Building materials include cement, stones, pottery products (ceramic goods), roofing materials, masonry materials (lime, plaster, etc.), door frames and other building tools (kongu).

#### 27. Prefabricated Building Materials (Choripsik Konjae)

These are building materials produced for assembly-type construction. Primarily they refer to concrete building materials, and currently more than 30 kinds of prefabricated building materials are being produced in Korea (including pillars, floor partition screens, steps, beams, window frames and pen frames).

#### 28. Panel Construction (Pianelsik Kujo)

A panel is a broad sheet material made of reinforced concrete, and it is used for walls, floor partitions, etc., in plant construction. Panel construction is a type of construction which requires the asembling of only prefabricated building materials at construction sites.

## 29. Standardization of Accessory Building Materials (Konsol Pujaeui Kyugyokhwa)

This refers to a standard of measure for the mass production of accessory building materials (pujae), such as pillars, beams roofing frames and door frames, according to uniform standards of shape and size.

#### 30. Slates (Sure tu)

There are two kinds of slates; natural and artificial.

Natural slates are a type of shale (e.g., Schist) and are obtained by cleaving along the seams of multi-seam rocks. When processed and standardized, they are called "standard slates" and used mostly for roofing.

Artificial slates are made by pressing a mixture of cement and asbestos (at a rate of nine to one) and used for roof-ing and walls.

#### 31. Shore Protecting Forests (Hoallim)

These are forests planted to reinforce and protect sea shores riparian shores and dikes against the erosion threatened by water.

# 32. Old Decaying Trees (Kosonmok)

These are trees which, through lack of maintenance, have started to decay. These trees are cut down after they are attacked by injurious pests, are subjected to the effect of efflorescence and weather, or near the end of their natural lives. Since old decaying trees would rot if left alone, they have to be utilized immediately for lumber processing.

#### 33. Branch Timber (Chiodumok)

In timber cutting, those parts other than the trunk section, which provide the basic lumber material, are called branch timber. In accordance with the state demand for timber economization, it is highly important to utilize fully branch timber for gallery logs, pegs, burning wood, containers and furniture building.

#### E. Light Industry and Fisheries

#### 1. Light Industry (Kyonggongop)

In general, it refers to industry specializing in the production of consumer goods that satisfy the daily needs

of the people. Belonging to the light industry are the textile industry, the garment industry, the shoe industry, the food industry (floor mill, rice mill, cigarettes factory, brewery, etc.) and the paper industry.

#### 2. Textile Industry (Pangjik Kongop)

The thread making industry and the cloth weaving industry collectively make up the textile industry. In the textile industry, there are cotton textile industries, hemp textile industries, woolen textile industries and silk textile industries.

#### 3. Pulp (P'alpu)

Pulp provides the raw material for paper, synthetic silk and staple fibre. Wood, grass (reed) and grain stocks (straws, corn stocks, etc.) are used as raw materials for pulp. There are both chemical and mechanical pulp. Chemical pulp is obtained through chemical treatment with reagents, and it includes pulp sulfite (aryusan p'alp'u), pulp chloride (yomso p'alp'u), pulp sulfate (yusanyom p'alp'i) and soda pulp. Mechanical pulp is the pulp obtained through mechanical crushing operations.

## 4. Synthetic Silk Pulp (Ingyon P'alp'u)

Synthetic silk pulp is the raw material for both synthetic silk and staple fiber. This pulp is obtained through a more complicated kind of chemical treatment than the one required for paper making. Wood was chiefly used as the raw material for this type of pulp in the past, but today this pulp is also obtained from grass (reed).

#### 5. Staple Fiber (Sup'u)

This is a synthetic fiber (similar to raw cotton) obtained from synthetic silk pulp. This fiber is used to make either genuine staple fiber thread or mixed thread with cotton or wool, and the thread so produced is used for weaving. Staple fiber thread is widely used abroad as a substitute of woolen thread or woolen textile after it has been put through pseudo-wool (unimo) [lit.] processing.

#### 6. Gill Net Fishing (Chamang Oop)

This is a fishing method chiefly adopted in small scale

fisheries (at sea not far from the coast line). It is a method of intercepting fishes by laying down nets along the routes of fishes prior to their actual arrival.

## 7. Long Line Fishing (Yonsung Oop)

Like gill net fishing, this also is a fishing method adopted chiefly among small scale fisheries. It is a method of fishing with many angles attached to a rope (sea weed rope) at intervals of 1.0 to 1.5 meters.

## 8. Local Fisheries (Chibang Oop)

These are fisheries maintained in certain localities in accordance with certain geographical peculiarities, limnological conditions and fish distribution peculiar to those localities. By this method, they fish for fishes generally settled in certain localities, e.g., white fish in the Yalu River.

### F. Transportation and Communications

## 1. Rolling Stock Park (Hwach'a Pparuk'u)

The Russian word "park" means either marshalling yard or the total number of cars, and the term "rolling stock park" means either the total number of rolling stock or a particular group of rolling stock. In Korea, the term "rolling stock park" is a unit of the Railroad Control Bureau (Ch'oldo Kwalliguk). "Operational rolling stock park" (hwach a-ui unyong p'aruku) means the total number of rolling stock both in operation and in reserve for immediate operation. The term "park" is applied in the same sense, to locomotives, passenger cars, as well as to freight cars.

#### 2. Broad Gauge (Kwanggwe)

There are two kinds of railroads: Broad gauge railroads and narrow gauge railroads. Railroads which have broad tracks are broad gauge railroads, and the principal railroads are all of broad gauge. Broad gauge standards differ in different countries. In Korea the width of broad gauge railroads is 1.435 millimeters which is the same in width as it is in China. [This is also called "standard gauge"

in the US and elsewhere.] However, in the Soviet Union the width of the broad gauge track is 1.524 millimeters.

#### 3. Narrow Gauge

Railroad which has a narrow gauge track is called a narrow gauge railroad. Like the broad gauge, narrow gauge width of track differ between individual countries and, sometimes, even in the same country. The width of narrow gauge railroads as controlled by the Ministry of Transportation is 645 millimeters. Railroads which are traditionally called light convenient railroads (kyongp'yon ch'oldo) belong in this category. However, there are tracks of even narrower gauge in use on the forest railroads operated by the Bureau of Forestry (Imopkuk) and on the railroads connecting ore mines and coal mines with the nearest stations [on main line railroads].

#### 4. Rail-borne Cargo Circulation (Chioldo Hwamul Sunhwan)

This is one of the most important indices indicating cargo carriage in rail transport. Since cargo transport involves moving cargo from one location to another, cargo carriage (hwamul susongnyang) has to be indicated in terms of the quantity of cargo transported and the distance carried. Thus, cargo circulation (hwamul sunhwan) is a compound index representing both the quantity of cargo and the distance carried. Therefore, the amount of cargo circulation is the numerical value obtained by multiplying the volume of freight expressed in tons by the distance expressed in kilometers, and the unit representing that numerical value is the ton/kilometer.

#### 5. Rolling Stock Turnaround Time (Hwach's Hoegwi Ilsu)

This is the total time consumed in the transport of one carload of freight, expressed in terms of days [and fractions thereof], reckoned from the moment when loading is begun at the station of origin to the moment, when, after the original load has been completely discharged at its destination, the loading of a new load on the same car is begun at the same station [or at any other station to which the "empty" may have been moved].

## 6. Passage Capacity (T'onggwa Nungnyok)

By this is meant the number of trains that can be passed over a given section (kugan) of a railroad during a 24-hour period. Passage of a greater number of trains and a greater quantity of cargo calls for increases in passage capacity. To this end, a series of requirements have to be met, i.e., prevention of train accidents and breakdowns, maintenance of regular train operations, speedy loading and unloading of cargo, systematic installation of signal apparatus, a clear view of signals installed, [and other measures].

#### 7. Travel Speed (Yongop Sokdo)

This is the average running speed of a train between certain points on a railroad, including the time consumed for stops at intermediate stations.

#### 8. Technical Speed (Kisul Sokdo)

This is the average speed of a train between certain points on a railroad and includes only the time consumed for actual running, and thus excludes the time consumed for stops at intermediate stations. "To increase the technical speed of lines" means to maintain lines in good condition so that trains can run at normal speeds.

#### 9. Relay Transport (Yongye Susong)

This takes place when it is desired or necessary to interconnect various transport control bureaus, between individual states, between broad gauge and narrow gauge tracks, between rail transport and highway transport, and between land transport and marine transport, there must be provided relay points (called junctions or transhipment points) where train transfer or transhipment of cargo (cargo reloading for transfer) can be performed. For example, cargo sent from Haeju for P'yongyang by rail has to come to Sariwon by way of the Hwanghae Line which is a narrow gauge railroad, and at Sariwon, which is a junction point, the cargo has to be transshipped because the railroad running between Sariwon and P'yongyang is a broad gauge line. Transport which requires this sort of transfer of trains or the transshipment of cargo at a junction is called relay transport.

#### 10. Direct Through Transport (Chichung Susong)

In rail transport, to insure speedier transport, shorten car turnaround time, and utilize rolling-stock more effectively, it is advantageous to select loaded cars, which because of their contents, have common stations of origin and destination, and to make them up into "through" trains, exclusive of cars having other destinations. Such through trains are then able to proceed with a minimum of stops and delays enroute direct to their common destination. Direct through transport is also applicable to highway transport.

## 11. Collective Control of Vehicles (Chadongch aui Chipchung Kwalli)

By collective control of vehicles is meant the pooling and controlling by one or more agencies, of the vehicles of diverse ownership or assignment, whereby they may be used in common. This is conducive to effective utilization and economy.

## 12. Number of Vehicles Dispatch System (Chadongch aui Taesu Paech aje)

This refers to a system in which assignments of vehicles are made according to the total number requested without carefully determining the total volume and nature of material to be transported by the consignees. This dispatch system is highly wasteful in terms of vehicle utilization and highly inefficient in regulating work loads. In contrast to the number of vehicles dispatch system, there is the collective dispatch system (chipjung paech aje) in which vehicles are collectively dispatched according to the types of cargo to be moved and their locations. This method of dispatch is very effective in shortening the running time (unhaeng sigan) of vehicles, in eliminating empty cars (yongch'a), in economizing on work loads, and in shortening layover periods.

## 13. Effective Length of Yard Limits (Kunaeson Yuhyojang)

The distance between the red signs, or markers, along main tracks at the two extremities of a station platform is called the effective length of the station's yard limits. [If they are to stop at a station] trains must stop within these limits. In stations where there are departure signals, the effective length is defined as the space between the departure signal and the delineator on the opposite side;

where there are no departure signals the effective length is the space between the two delineators.

#### 14. Sidings in Station Compounds (Yok Kunae Chiukson)

These are tracks laid in the station compound parallel to end on either side of the two main lines; one north-bound and the other south-bound. Sidings are used to conduct or pass incoming trains when the main lines are already occupied by other trains, to load and unload rolling stocks, or just to put rolling stocks in reserve.

#### 15. Operational Facilities (Unjon Solbi)

Locomotive sheds (kigwangu), car testing stations (komch'agu), railroad stations, water supply and coal loading equipment for locomotives, communication systems along the rails, signal apparatus and all the other facilities required for the operation of trains are collectively called operational facilities.

#### 16. Green Light Street [lit.] (B'urun Kori)

This is term that has reference to the passing signal for trains. In order for train to proceed, signals installed in stations and at other places along the rail line must indicate a green light. Accordingly, smooth running of a train requires that every signal met along its route indicate a green light. Green lights all along the route by successive signals, is analogously referred to as a "green light street," the analogy being derived from city streets and street traffic lights.

## 17. Automatic Signal System in Locomotives (Chranae Chadong Sinho Changch'i)

A locomotive engineer runs his locomotive by watching signals along the track, but there may be times when he cannot see the signals well, due to inclement weather caused by rain, snow or fog. To meet such unusual operating circumstances, an automatic signal system has been installed in locomotives which indicate signals electrically. This system is called the automatic signal system for locomotives.

### 18. Automatic Lock-Out Apparatus (Chadong P'esaek Changch'i)

Like the pass ticket lock-out, this is a signal apparatus

used for controlling the movement of trains. By utilizing electrical and mechanical means this apparatus automatically projects various lights that indicate the movement of trains along the route (e.g., green color means pass; copper-yellow color means to be cautious because of a train now running two sections ahead; and red color means a full stop because of a train now in the section immediately ahead). Ordinartly for the sake of safety, it has been the rule not to permit more than one train between Station A and Station B. But an increase in the number of trains renders this operation very unprofitable. Hitherto, if Station A wanted to dispatch two trains toward Station B, it could dispatch the second train only after the first train had arrived at Station B.

However, with the adoption of automatic lock-out apparatus, double-track railroads can control the movement of several trains by means of a number of signals installed in each of a number of blocks into which total distance between the two stations is divided.

As a result, unlike the pass ticket lock-out system which does not permit more than one train between two stations, the automatic lock-out apparatus enable Station A to dispatch a second [or third] train even before the first train has arrived at Station B. Therefore, this system is highly advantageous in increasing the passage capacity of a section between consecutive stations.

#### 19. Pass Ticket Lock-out (T'ongp'yo P'esaek)

This is a measure designed to ensure the safe movement of trains along single-track railroads. The pass ticket (t'ongp'yo) is a certificate that permits one train at a time to monopolize the use of the lock-out section (p'esaek kugan) between the departure signal of the departure station and the signal of the arrival station. (But with automatic lock-out apparatus the lock-out section is the section between successive block signals). A locomotive engineer can move a train out only after he receives a pass ticket at the departure station.

The term "lock-out" (p'esaek) means that no more than one train at a time is permitted in a given section of rail-road. According to the pass ticket lock-out method for example, the Assistant Station Master in Charge of operations (unjon choyok) at the P'yongyang Station has to call his

counterpart at the [West] P'yongyang Station by using the telephone attached to the pass ticket lock-out machine (t'ongp'yo p'esaekki) and inform him that a train is about to leave for their station.

When the west P'yongyang Station is ready to receive that train, the Assistant Station Master in charge of operations tells him to send the train and, at the same time, presses a switch to transmit the electric current to the pass ticket lock-out machine at the P'yongyang Station (the pass ticket lock-out machine opens only when the receiving station transmits the electric current).

Then the pass ticket lock-out machine at the P'yongyang Station opens itself, following which the Assistant Station Master takes out a pass ticket from the machine and hands it over to the locomotive engineer so that the train can now leave for the west P'yongyang Station. In this manner, while that train runs the line between P'yongyang and West P'yongyang Stations all other trains are completely excluded from that line. This is called pass ticket lock-out.

#### 20. Slow Passage Points (Schaeng Kaeso)

Immediately after railroads, which have been destroyed or washed away, are reconstructed or repaired, the roadbed (noban) as well as the superstructures (sangbu kujo) of railroads may still remain unconsolidated, and hence trains must not run at a high speed lest the foundations collapse and cause trains to tumble or derail. Therefore, along those points, trains are to run at low speeds and these points are called slow passage points.

#### 21. Running Efficiency (Unhaeng Hyoyul)

In principle, trains are to be operated on schedule, with strictly punctual departures and arrivals at all the stations. But certain conditions do not always permit this to be the case. Running efficiency is the ratio between operations running on schedule and irregular operations caused by delays in departures and arrivals.

### 22. Operational Efficiency (Unyong Hyoyul)

This is the ratio between the total number of rolling stocks ready for operation and the number of rolling stocks actually put into operation. This term applies individually to locomotives, passenger cars and freight cars.

#### 23. Engine Depot (Kigwangu)

This is a railroad enterprise which has all the facilities necessary for the management and operation of locomotives. In these depots there are locomotive repair shops and facilities of the loading of coal and sand, and water supply facilities for locomotives. Locomotive crews also belong to this type of depot.

#### 24. Technical Stations (Kisulyok)

These are some large stations that include technical testing stations (kisul komsaso). In addition to handling regular passengers and cargo, these stations also perform technical functions such as assembling and breaking up (haech'e) trains, replacing locomotives, changing train crew, supplying water to locomotives and passenger cars, loading coal on locomotives, and simple adjusting and repairing of certain malfunctioning parts discovered while on the routes. Examples are such large stations as P'yong-yang, Sinuiju, Wonsan, Kowon, Hamhung and others.

#### 25. Marshalling Yards (Choch ajang)

These are the stations exclusively devoted to the assembling and dismantling of trains. Neither passengers nor freight are loaded or unloaded here.

#### 26. Repair Base (Suri Paja)

The term "paja" [transliteration of Russian "baza"] is derived from a foreign language, and it means "base", "ware-house" or foundation". However, "repair base," as used in railroad parlance, means railroad shops, repair shops attached to engine depots and car testing depots (komch'agu), and simple repair shops of technical testing stations attached to the technical stations, etc.

#### 27. Source of Repair (Suri Wonch'on) [Car Repair Depot]

This is a term used chiefly in relation to the repair of rolling stock, and the term collectively refers to all rolling stock to be repaired and the equipment and supplies as well as the working force required for the reapir work.

#### 28. Examination and Repair by Train Crews (Chagom Chasu)

Between regular periodic examinations, locomotive crews (and vehicle operators) are to perform individual insepctions on their locomotives (vehicles) in order to prevent the occurrence of threatened trouble by themselves repairing minior defects and malfunctioning parts. This activity is called examination and repair by train crews.

#### 29. Computation of Traction Capacity (Kyonin Kyesan)

The standard fixed capacity (p'yojun chengnyang) indicates the quantity of cargo that can be pulled by various locomotives within a given railroad sector is called fixed traction capacity [or normal train load] (kyonin chongnyang) and is ordinarily indicated in tons. Computation of this fixed traction capacity is called computation of traction capacity whereby the amount of steam and coal consumed by a locomotive is also simultaneously computed. Fixed traction capacity in individual sections varies according to varying grades and curvature of lines and varying kinds of locomotives. Computation of traction capacity is highly important, for without it distribution of engine depots, evaluation of transport capacity and organizational transport tasks cannot be systematically and economically executed.

## 30. Curve of Locomotive Traction Capacity Characteristics (Kigwanch'a ui Kyonin T'uksong Kokson)

This is a curve which appears when the characteristics of locomotive traction capacity in a given section of rail-road are graphically indicated. This curve indicates the total cargo a given locomotive can pull at a certain speed, and it varies according to the individual characteristics of locomotives, the grade of tracks, the locomotive speeds and the weight of cargo it carries.

### 31. Traction Capacity Measuring Car (Kyeryokeh'a)

This is a car which measures the traction capacity of a locomotive. Only through measurement with this car can an accurate computation of traction capacity be made.

#### 32. Private Lines (Chonyongson)

Railroad lines connecting such important enterprises as plants and mines with the nearest stations are called the

private lines of the enterprises [on spur tracks]. Freight is transported to warehouses, mines and other enterprises directly along these lines and collects freight from these enterprises. No passengers are handled by these lines.

## 33. Superstructure of Tracks (Solloui Sangbu Kujo)

Ballast, cross ties, rails, rail attachments, and "pokjin" preventing apparatus and switches (pungigi); all of these are laid on the surface of the base of railroad tracks (noban), and are collectively called the superstructure of tracks. The "pokjin" preventing apparatus is an apparatus to prevent the downward creep of rails and cross ties (i.e., two sturdy stakes fixed in front of each cross tie) which would otherwise occur because of the inertia of trains when the brakes are applied to wheels over rails as they descend grades (this creep phenomenon is called "pokjin"). The switch is a mechanism installed at points where one track separates into two or more lines (e.g., the connecting point of main lines and side lines in a station compound), or two lines converge into one line.

## 34. Load Capacity of A Bridge (Kyoryang ui Hajung Chogon)

Steel bridges and other bridges have certain load limitations depending on their structure and durability. Accordingly, if a load exceeding its capacity is passed over a bridge it may collapse. The size of the load which a bridge can safely sustain is called the load capacity of a bridge.

## 35. Spans of Steel Bridges (Chiolgyo Kada)

The steel superstructure between the bridge piers on which the railway track is laid, are collectively called the spans of steel bridges.

# 36. Amount of Evaporation of Fuel Calorie (Yollyo K'alloriui Tunggaryang)

This term is frequently used in connection with the computation of heat emanating from coals used in locomotives. The term "calorie" is the unit of heat, and one calorie is the amount of heat required to raise the temperature one gram of chemically pure water from 14.5°C to 15.5°C under a pressure of one atmosphere. Since there are different varieties of fuels, the amount of fuel consumed to attain

a given number of calories also differs. The amount of calorie evaporation of fuel is the ratio between the amount of a specific kind of fuel consumed with that of the standard fuel (kijun yollyo) required to attain the same number of calories.

#### III. AGRICULTURAL ECONOMY

## 1. Socialist Transformation of the Agricultural Economy (Nongch'on Kyongniui Sahoejuuijok Kaejo)

Because of their low technological levels, small scale private farm enterprises are not only incapable of developing agriculture at rates corresponding to the development of socialist industry, but they also create obstacles to industrial development. Furthermore, they are also the source of constantly emerging capitalist elements. For this reason, socialist construction calls for not only the industrialization, but also the socialist transformation of small scale private farm enterprises.

The only way leading to socialistic transformation of a farm economy is the collectivization of that economy.

Collectivization within a farm economy calls for farmers to voluntarily incorporate themselves and their means of production such as land, draft animals and farm implements into joint ownership within agricultural cooperatives and to cultivate the land on a large collectivized scale while receiving a proper share of the distribution according to the quantity as well as the quality of their labor. It is only after this stage is achieved that modern farm implements can be introduced into agriculture. Farm enterprises can then be transformed into advanced large scale enterprises that provide solid foundations for socialism.

# 2. <u>Diversified Production by Agricultural</u> <u>Cooperatives</u> (Nongop Hyopdong Chohapui Tagakchok Saengsan)

This refers to the organization of production by agricultural cooperatives with a view to utilizing all the productive potentialities, particularly in view of the natural and economic conditions that are peculiar to individual cooperatives. Hence they are used to raise not only food grain crops but also industrial crops and they are also engaged in animal husbandry, pomiculture, sericulture, fisheries and others.

## 3. Cultivated Land Area of the Farmers (Nongmin Kyongni Kyongji Myonjok)

Farmers' enterprise (nongmin kyongni) refers to all agricultural enterprise managed by farmers, including both those integrated into agricultural cooperatives and those of private farmers. The cultivated land area of the farmers refers to the entire land area of rice paddies, fields and orchards cultivated by those farmers.

#### 4. Planted Land Area (P'ajong Myonjok)

This is that portion of cultivated land area sown with crop seeds. Planted land area and cultivated land area differ. For example, if seeds are sown twice a year over one "chongbo" [equivalent to 2.45 acres] of cultivated land area, the total planted land area will be twice as large as the cultivated land area.

#### 5. Irrigated Rice Paddy District (Mongni Kuyok)

An area consisting of rice paddies which can draw water from irrigation networks is called the area of irrigated rice paddies (mongni myonjck). The geographical district occupied by this irrigated rice paddy area is called the irrigated rice paddy district.

#### 6. Machine Tractor Stations (Nonggigye Imgyongso)

These are State operated enterprises that aid farmers with modern farm implements such as tractors, sowers, harrows and combines (motorized harvesters). These stations render services under contract with agricultural cooperatives and private farmers, and fees for these services are paid in kind within a prescribed period.

#### 7. Land Development Works (T'oji Konsol Saop)

These refer to the organization and execution of a series of technological, administrative and agronomical works, such as irrigation projects, flood control, land leveling, construction of waterways, crop field protecting forests (wind resisting forests), organization of lots (systematic distribution of housing lots, productive plant sites, and arable lands), and construction of roads (rural roads).

#### 8. Demarcated Arable Land Leveling (P'ojon Chongni)

In general, demarcated arable land (p<sup>t</sup>ojon) is either paddy or dry field land, demarcated from the agronomical point of view to meet the need for an orderly distribution of crops to be planted.

Demarcated arable land leveling is a series of works performed to ensure better conditions for mechanized operations and to maximize land utilization by eliminating unnecessary narrow paths among the fields and paddies within the demarcation lines, by leveling uneven grounds, and straigthening detour waterways and roads,

#### 9. Renovated Farm Implements (Kaeryang Nonggigye)

These are traditional implements of the Korean farmers which have been improved and made very efficient and convenient for use again. Examples are animal drawn sowers, animal drawn weeders, motorized threshers, harrows, etc.

#### 10. Fertilization Program (Sibi Chiegye)

This is a program to administer fertilizers on farm crops. This program is set up by taking into account various requirements as well as characteristics of individual fertilizers, such as when and how often a given fertilizer or other fertilizers should be applied, and if applied, whether to use subsoil fertilization or surface fertilization.

#### 11. Food Grain Crops (Algok)

Rice, barley, wheat, beans, red beans, peas, corn, millet, Italian millet, "kijang" (a type of millet-panicum miliaceum), buckwheat p'i [a millet - panicum cruo-galli], etc., are collectively called food grain crops.

#### 12. Industrial Crops (Kongye Changmul)

These are farm crops used as raw materials in industry. Industrial crops produced in Korea are as follows:

- (1) Raw materials for fibers (cotton, flax, hemp, ramie);
- (2) Raw materials for flour mills, breweries and oil industries (wheat, corn, millet, beans, peanuts);

- (3) Raw materials for pulp (Grass, rice straw, millet stocks, bean shells, etc.); and
- (4) Raw materials for pleasure goods and others (tobacco, fruits, sugar beets, medicinal herbs, etc.).

#### 13. Productive Domestic Animals (Saengsan Kachiuk)

Domestic animals that are raised to provide livestock products are called productive domestic animals and include animals such as hogs which provide pork, sheep which provide wool, milking cows which provide milk, etc.

## IV. CAPITAL CONSTRUCTION

# 1. Capital Investment and Capital Construction (Kibon T'ujawa Kibon Konsol)

Funds allocated to individual sectors of the people's economy and to individual enterprises for constructing plants, warehouses and buildings, for installing or assembling machinery, equipment and tools, and for purchasing such means of transport as trucks, oxen and horse carriages are called capital investment funds, and work (construction) performed with capital investment funds is called capital construction. At times capital investment includes funds disbursed to individual sectors and enterprises to supplement or repair (major repair works) certain depreciated portions of existing machines, buildings and means of transport.

# 2. Productive Construction (Saengsanjok Konsol)

This is construction carried out exclusively for production, and it includes, for example, industrial plants, structures, machinery, railroad spur lines, land development works, etc.

# 3. Non-Productive Construction (Pisaengsanjok Konsol)

This includes the construction of houses, hospitals, schools, nurseries, theatres, etc., which, while not directly contributing to increasing productivity as productive construction does, in an indispensible prerequisite to an increase in productivity.

# 4. Scope of Construction (Konsol Kyumo)

This means the total expenditure required for the execution of productive construction and non-productive construction (i.e., new establishments, rehabilitation, reconstruction, expansion, etc.).

# 5. Reconstruction (Kaegon)

This refers to the improvement and renovation of buildings and machinery damaged by war or other disasters to recover their original capacities. It also includes certain types of renovation performed on existing facilities to increase their utilization.

# 6. Standard Design (P'yojun Solgye)

This is a prospective design (chonmang solgye) based on a prospective construction plan (kensel chonmang kychoek) for buildings to be constructed in large number and in repetition and having identical content and shape. This design is set up before drafting the object designed.

In this design, the basic requirement has to be a maximum standardization of shapes and sizes of building materials and parts and a limitation in terms of varieties.

## 7. Object Design (Taesang Solgye)

This is a design for individual objects of construction (e.g., P'yongyang Textile Mill or The First Building of the Kimch ack Engineering College). This design is based on a given designing task (which is based on the entire plan) and is drafted by taking into account the most concrete elements and peculiarities in individual construction.

# 8. Operational Design (Sigong Solgye)

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This is a design for actual construction and used at the construction site. This design should include various detailed designs, which are not included in expanded design tasks or technical design documents, and including such designs of individual localized phases as architecturalaesthetic details, internal designs, and electrical, heating and water supply facilities, A budget envisaging an itemized expenditure for each detailof construction is also attached to the operational design.

# 9. Concentration of Investment (T'ujaui Chipchung)

In capital construction, individual construction projects are given an order of priority in the light of overall economic effectiveness, and investment is concentrated on projects which are of great importance (thus of high priority). This is called the concentration of investment. and the state of t

## V. CAPITALIST ECONOMY IN GENERAL

## 1. Monopoly Capital (Tokshom Chabon)

Capitalists who alone produce or sell most of the products for one or more industrial sectors enter into agreements, alliances or qualitions in order to price those goods high and gain high rates of profit; these alignments are called monopolies. The capital which belongs to this monopoly is called monopoly capital.

In imperialist countries, this monopoly capital strongly grips many sectors of the heavy and light industries, rail transport, banking, domestic commerce and foreign trade, and its impact is felt even by agriculture.

# 2. Total Crisis of Capitalism (Chabonjuuiui Chonbanjok Wigi)

Because of wars and revolutions which are, by nature, the products of capitalism, and because of the struggle between dying capitalism and growing socialism the world over, the entire capitalist system is faced with crises on all sides (in economy and in politics), and this is called the total crisis of capitalism.

A few basic signs that indicate the total crisis of capitalism are as follows:

- (1) Division of the world between two conflicting systems, capitalism and socialism;
  - (2) Crisis in the imperialist colonial administrations;
  - (3) Aggravated marketing problems; and
- (4) Operation of productive facilities below capacity and mass unemployment.

# 3. Panic (Konghwang)

This is a phenomenon recurring every eight to twelve years in capitalist societies (the societies where the products of millions of workers are monopolized by the capitalists who own the means of production).

Capitalists expand production and supply additional commodities to the market only to gain maximum profit. But a decrease in the real wages of the workers, who constitute the majority of the people who purchase those commodities, and the distress of the farmers creates, in effect, a relatively smaller demand for those commodities. In other words, even though the total volume of commodities produced is increasing, the demand of the workers who constitute the majority of the consumers is decreasing. When this contradiction reaches its peak and affects production abruptly and destructively to the extent of threatening solvency, the phenomenon is called panic.

When panic occurs, suprlus goods stockpiled in warehouses are not sold, prices rapidly fall, money becomes scarce, and the stock markets collapse, bringing many enterprises to bankruptcy. Production rapidly falls, unemployment increases, and wages decline. This forces many enterprises into bankruptcy and destroys the primary stage of production. Panic now affects production forcibly by reducing, in the very short run, the effective demand [for goods].

# 4. Impoverishment of the Workers (Kullojadului Pingunghwa)

As capitalism develops, the exploitation of the workers by the capitalists increases. As unemployment and poverty of the workers increase, greater capital is concentrated in the hands of the capitalists and their extravagance and waste mounts higher.

As capitalism develops, the workers are impoverished not only in relative terms but also in absolute terms.

Relative impoverishment of the workers means that in the capitalism society the workers share of the total national income constantly increases. Absolute impoverishment of the workers, on the other hand, means that the workers become poorer than before and their living standard is lowered.

# 5. Colonial Imbalance of Industry (Kongopui Singminjijok P'yonp'asong)

In order to exploit colonies systematically, the imperialists leave their colonies in a crippled condition without developing industries in a coordinated manner. This is called the colonial imbalance of industry.

In the past, the Japanese imperialists exploited Korea by making it a source of farm produce and industrial raw materials, and also made her into a market for Japanese products, thereby preventing the development of industry in Korea as far as possible. However, they did develop the mining industry to exploit raw materials which they themselves needed and a few profitable light industries such as the cotton textile industry and the food processing industry.

The development of heavy industry, which provides the foundation for a self-sufficient national economy, was very meagre (except that some plants were built to supply military supplies after the aggressive war was started against China), and there was almost no machine building industry. They also prohibited the development of tool making industries. All essential tools had to be imported from Japan at high prices.

Even productive facilities were distributed only in a manner highly advantageous to explcitation by the Japanese imperialists. For example, light industries were developed only in a certain region while heavy industries were developed in other regions. All the important plants were exclusively concentrated along the coastal region. Thus while Korea remained a colony of the Japanese imperialists, no independent development of industry was feasible, and they were subjected to the economy of the Japanese imperialists. Korea was forcibly left in a crippled condition very conducive to exploitation and deprivation. This type of situation is called colonial imbalance.

# 6. Subservient Capitalists (Yesok Chabonga)

These are capitalists in colonies and semi-colonies who, as stooges of the monopolists of foreign imperialism, play an intermediary role during latter's exploitation of colonies and semi-colonies, which provide them with marekts and sources of raw materials.

In other words, by betraying the political and economic interests of their own nation, these capitalists help the foreign imperialists to exploit the colonies as their running dogs, and as accomplices they also receive a share of the profit which the imperialists gain through exploitation.

### 7. National Capitalists (Minjok Chabonga)

These are the capitalists who, although they pursue maximum profit by exploiting the working classes and the farmers, are not subject to foreign imperialists in capital formation and other ways.

In colonies and semi-colonies, the national capitalists operate on a smaller scale than the subservient capitalists, and due to their inability to compete against the foreign imperialists on the one hand and the restrictions of feudal remnants imposed on them on the other, the national capitalists gradually die away.

For this reason, the national capitalists are potential participants in the struggle against imperialism and feudalism and are capable of playing a progressive role.

## 8. <u>Inflation</u> (Inp<sup>t</sup>ulleson)

In a given country, the volume of currency circulated to aid commodity circulation is limited. In other words, the total volume of necessary currency is determined according to the total volume of commodities in circulation, the aggregate of prices and the velocity of currency circulation. However, if for some reason, large number (nominal) of bills and bank notes are issued in excess of the demand in commodity circulation, the currency becomes inflated.

In other words, surplus currency overflows and exceeds the monetary demand in commodity circulation. As a result, the purchasing power of a given amount of money decreases, and the prices of commodities increase. This inflation of currency is called inflation.

Inflation is a phenomenon inherent in capitalist societies and has class content. As bills are issued at random to cover budgetary deficits and military expenses, prices of goods increases, the real wages of industrial workers decreases and farmers are brought into distress on the one hand, and the exploiting class makes a large profit on the other.

It goes without saying that there cannot be inflation of such class content in Korea. It is possible that an inflationary phenomenon can temporarily occur in an emergency period such as the war. But, even then, adequate restraining

measures taken in the ensure a recovery of normal situations within a certain period.

### VI. OTHERS

## 1. Man-Day (Kongsu)

This unit measures the amount of labor expended in performing certain works; namely, one man-day is the amount of labor that one worker performs a day. For example, if one man can lay 800 pieces of bricks a day, the man-day required to lay 8,000 pieces of bricks is 10 man-days.

### 2. Horsepower (Maryok)

This is a unit that measures the rate of work (kongnyul). "Work" (kong) here means work power. The unit is the numerical value derived by multiplying weight (kilogram) by distance (meter), i.e., meter-kilograms. For example, if a machine lifts a load of 75 kilograms one meter high, the work (power) performed by this machine is 75 meter-kilograms. Thus the rate of work indicates the amount of work (power) performed within a given unit of time. Since one horse can perform work at 75 meter-kilograms per second, this rate of work is called "horsepower."

In other words, horsepower is the work (power) of one horse lifting a load of 75 kilograms one meter high per second.

# 3. Mark (Marukka)

This is a term derived from a foreign language with a meaning quite similar to sign or trademark in Korean. In other words, mark frequently indicates various characteristcis of a product, such as the name of the producer, types and size. For example, passenger automobiles sent by the Soviets to Korea bear the mark "ZIS" [in Russian], and this mark means that the automobile is produced by an automobile plant named after Stalin.

This term is also used to indicate the strength of certain building materials. For example, mark 40 in bricks

means that those bricks can support a load of 40 kilograms per square centimeter.

## 4. Profile (Ppurohwil)

Derived from a foreign language, this term means chiefly "side phase" or "view seen from the side." Sometimes this term also means a sectional view. For example, "profife of a building" means the view of the building from the side or sectional view of the building. 

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#### APPENDIX

#### GLOSSARY OF TERMS

#### Korean Term

Abyon Kangjae Algok Aryusan Kasu Aset'illen

Chabonjuuiui Chonbanjok Wigi Chabonjuuijok Kyongje Hyongt'ae Ch'aegwang Chadong P'esaek Changch'i

Chadongch'aui Chipehung Kwalli

Chadongch'aui Taesu Peach'aje

Chagom Chasu

Chagopehang Chamang Oop Ch'anae Chadong Sinho Changch'i

Chasokkang
Chech'olso
Chegangso
Chep'um Saengsaneso Chunbi
Kwanjong
Cheryonso
Chibang Oop
Chilsan Ammonia
Chingnyu
Chipchung Susong
Choap Kiguryu

Choch ajang Chiodumok Chohangson Chioldo Hwamul Sunhwan

Chollyok Kwalli Ch'olgyo Kada Chollyok Kyet'ong

### English Term

Rolled Steel Material FoodGrain Crops Sulfur Dioxide Acetylene

Total Crisis of Capitalism Capitalist Economic System Mineral Extraction Automatic Lock-out Appa-Collective Control of Vehicles Number of Vehicles Dispatch System Examination and Repair by Train Crews Working Place Gill Net Fishing Automatic Signal System in Locomotives Magnetic Steel Iron Works Steel Works Preparatory Processes in the Production of Goods Smelter Local Fisheries Ammonium Nitrate Direct Current Direct Through Transport Low Voltage Instruments and Tools Marshaling Yard Branch Timber Resistance Line Rail-borne Cargo Circulation Electric Power Control "Spans" of Steel Bridges Electric Power System

Chollyok Saengsanui Sonhaengsong Precedence of Electrical

Chon'gi Choryonp'um

Chon'gi Kiguryu

Chon'gi Kyegiryu

Chon gihwa
Chongsaengsanaek
Chonhae Nungnyok
Chonja Changch i
Chonmang Ingu
Chonmang Kyehoek
Chonyongson
Choripsik Konjae

Choryak Chedo Choryon Chaeryoyong Injo Suji

Choryon Chiryu Ch'osan Ch'osan Pinil Chunggongop Chunggongopui Usonjok Changsong

Chiukchong Kigu Chupiasu

Haet'allo
Hapkumsok
Hapsong Komu
Hapsong Somyu
Hoallim
Hoejollo
Huksaek Kumsok
Huigumsok
Hwaktae Chaesaengsan
Hwan'gang
Hwap'eui Anjonggwa Konggohwa

Hwap'ei Sunhwan Hwach'a Hoegwi Ilsu

#### English Term

Power Production Electric Insulating Ma-Electrical Instruments and Tools Electric Metering Instruments Electrification (1) Gross Output [Value of] Electrolytic Capacity Electronic Equipment Prospective Population Prospective Plan Private Lines Prefabricated Building Materials Economization System Artificial (Synthetic) Resin For Use in Electric Insulation Insulating Paper Acetic Acid Vinyl Acetate Heavy Industry Priority Development of Heavy Industry Measuring Instruments Frequency

Coke Oven
Alloy Metals
Synthetic Rubber
Synthetic Fiber
Shore Protecting Forests
Rotary Furnace
Ferrous Metals
Rare Metals
Expanded Reproduction
Round Bar Steel
Stability and Consolidation of Currency
Currency Circulation
Rolling Stock Turnaround
Time

Hwach'a Pparuk'u Hyonhaeng Kyehoek Hyopkwe

Ingyon P<sup>†</sup>alp<sup>†</sup>u Inmin Kyongje Inmin Kyongjei Kyehoekhwa

In Piryo Inp<sup>†</sup>ulleson Ipch<sup>†</sup>ol

Kaegon Kaeryang Nonggigye Kangch'ol Kasong Soda Kasuhwa Keksahullorang Kibon T'ujawa Kibon Konsol

Kigwanch aui Kyonin Tuksong Kokson

Kigwangu Kigyehwa Kijajae

Kisul Changbi Kisul Kwalli K'irowatt'u Kisul Saengsan Chaejong Kyehoek

Kisul Sokto
Kisulyok
Kk'ombeya Kulch'akki
K'omp'uressya
Konghwang
Kongjak Kigye
Kongopui Singminjijok
P'yonp'asong
Kongsu
Kongye Changmul
Kongye Kongop
Konsol Kyumo
Konsol Pujaeui Kyugyokhwa

#### English Term

Rolling Stock Park Current Plan Narrow Gauge

Synthetic Silk Pulp
People's Economy
Planning of the National
Economy
Phosphate Fertilizer
Inflation
Granulated Iron

Reconstruction Renovated Farm Implements Steel Caustic Soda Gasification Hexachloran Capital Investment and Capital Construction Curve of Locomotive Traction Capacity Characteristics Engine Depot Mechanization Machinery, Equipment, and Supplies Technical Provisions Technical Control Kilowatt Technical, Production and Financial Plans Technical Speed Technical Stations Conveyor Excavator Compressors Panic Machine Tools Colonial Imbalance of Industry Man-Day Industrial Crops Building Materials Industry Scope of Construction Standardization of Accessory Building Materials

Kosoktogang Kosonmok Koyolt'an Kukka Ch'ukchok Kukmin Soduk Kullojadului Pingunghwa

Kumsok Kagong Kongop Kunaeson Yuhyojang

K'urassya Kwanggwe Kwangsok Ch'aegurop Kwarinsan Sokhoe Kwigumsok Kyeryokch'a

Kyonggongop Kyonin Kyesan

Kyoryangui Hajung Chogon Kyoryu Kyugyok, Kyugyokhwa

Kyuso Kangp<sup>†</sup>an Kyuso Yugijil Choryonmul

Marukka
Maryok
Met'anol Kyet'ong
Miggisya
Minjok Chabonga
Misongp'um
Mongni Kuyok

Mugisan

Naesan, Naealk'ari Chep'um

Nakch'a Nodong Chojik Nodong Saengsan Nungnyul Nodongnyok

#### English Term

High Speed Steel Old Decaying Trees High Calorie Coal State Accumulation National Income Impoverishment of the Workers Metal Processing Industry Effective Length of Yard Limits Crushers Broad Gauge Mineral Mining Industry Superphosphate of Lime Precious Metals Traction Capacity Measuring Car Light Industry Computation of Traction Capacity Load Capacity of A Bridge Alternating Current Standard Specification, Standardization of Specifications Silicon Steel Sheet Silicon Organic Insulating Materials

Mark
Horsepower
Methanol System
Mixer
National Capitalists
Unfinished Product
Irrigated Rice Paddy
District
Inorganic Acid

Acid Resistant and Alkali Resistant Products Head Organization of Labor Labor Productivity Labor Force

Nodongui Chollyok Changbido

Nongch'on Kyongniui Sahoejuuijok Kaejo

Nonggigye Imgyongso Nongmin Kyongni Kyongji Myonjok

Nongop Hyopdong Chohapui. Tagakchok Saengsan

Noryok Chojik

Noryok Hubi Noryok Kwalli Noryok Wonchion

Onje Epiuron

P'ajong Myonjok
P'alp'u
Pangjik Kongop
Panjep'um
P'akk'ing
Palchonso
Palmyong, Hamnihwa
Palsongjon

Palsongjon Kyet'ongui Pansong Chollyue

Pandoch'e Chaeryo
Pianelsik Kujo
Pansahoejuuijok Kyongni
Hyongt'ae
Pisaengsanjok Chich'ul
Pisaengsanjok Konsol
Pojo Kiopso
P'ojon Chongni

Polmil
Polt'u
Polt'u Ambbeya

#### English Term

Degree of Power Provision for Labor
Socialist Transformation
of the Agricultural Economy
Machine Tractor Stations
Cultivated Land area of
the Farmers

Diversified Production by
Agricultural Cooperatives
Organization of the Labor
Force
Labor Reserve
Labor Force Control
Source of Labor

Dyke Apron

Planted Land Area Pulp Textile Industry Semi-Finished Product Packing Power Plant Invention, Rationalization Power Generation and Transmission Method of Protection Through Carrier Application in the Electric Generation and Transmission System Semiconducting Materials Panel Construction Semi-Socialist Management System Non-Productive Expenditure Non-productive Construction Auxiliary Enterprise Demarcated Arable Land Leveling Ball Mill Volt Volt Ampere

Ppurohwil
Puha
P'ullasut'umas Chep'um
P'urun Kori
P'yobaekpun
P'yojun, P'yojunhwa
P'yojun Solgye
P'yongno

Saengsan Chojik Saengsan Kach'uk Saengsan Kwangye Saengsan Kyumo Saengsan Myonjok Saengsan Nungnyogui Iyong Kyesu

Saengsan Sudan Saengsan Sujun Saengsan Yebi Saengsanjok Konsol Saengsannyok Sahoejuui Kongophwa Sahoejuuijok Kyongje Hyongtae

Sajok Saengsan Sangp'um Saengsanaek

Sanhyonggang Sibi Ch'egye Sigong Solgye Sijak Yongu

Silchil Imgum
Silsuryul
Siyak
Sobi Kijun
Sobijae
Sogyong
Sohaeng Kaeso
Sokhoe Chilso Piryo
Solbi Iyongnyul

Solloui Sangbu Kujo Sonchiol Songbaejonmang

#### English Term

Profile
Load
Plastic Products
Green Light Street
Bleaching Powder
Standard, Standardization
Standard Design
Open Hearth

Organization of Production Productive Domestic Animals Production Relations Scale of Production Production Area Utility Coefficient of Production Capacity Means of Production Production Level Production Potential Productive Construction Productive Power Socialist Industrialization System of Socialist Eco-Private Production Value of Output of Commodities Angle Steel Fertilization Program. Operational Design Research for Trial Manufacture Real Wage Percent Net Recovery Rate Reagent Norm of Consumption Consumer Goods Quenching Slow Passage Points Lime Nitrogen Fertilizer Utilization Rate of Facilities Superstructure of Tracks Power Transmission and Distribution Network

Son'gwang Sosangp'um Kyongje Hyongt'ae

Sullak'u
Suret'u
Suri Paja
Suri Wonch'on
Suryok Chijom
Sup'u

Taesang Solgye T'anso Konggugang Tchehu Tongnip Ch'aesanje

Tchehu T'oji Konsol Saop Tokchom Chabon T'onggwa Nungnyok Tongnip Ch'aesanje

Tongnyok Kwalli T'ongp'yo P'esaek T'ujaui Chipchung T'uksu Kangjae

Uiyakp'um Kongop Unhaeng Hyoyul Unjon Solbi Ungyong Hwahak Unyong Hyoyul

Wanjep'um Wonbang Ch'ukchong Wonga

Yagum Kongop Yesok Chabonga Yok Kunae Ch'ukson

Yol Kwalli Yollyo K'alloriui Tunggaryang

#### English Term

Ore Dressing
Small Commodity Economic
System
Slag
Slates
Repair Base
Source of Repair
Hydroelectric Power Site
Staple Fiber

Object Design
Carbon Tool Steel
Independent Accounting
System for Shops
Tsekh
Land Development Works
Monopoly Capital
Passage Capacity
Independent Accounting
System
Motive Force Control
Pass Ticket Lock-out
Concentration of Investment
Special Steel Materials

Medical Drug Industry Running Efficiency Operational Facilities Applied Chemistry Operational Efficiency

Finished Product Telemetering Cost

Metallurgical Industry
Subservient Capitalists
Sidings in Station Compounds
Heat Control
Amount of Evaporation of
Fuel Calorie

Yoman
Yomhwa Paryum
Yomhwa Pinil
Yonggwangno
Yongnyul
Yongop Sokto
Yongye Susong
Yonsung Oop
Yusaek Kumsok
Yusan Ammonia
Yugijil Piryo

## English Term

Ammonium Chloride
Barium Chloride
Vinyl Chloride
Blast Furnace
Power Ratio
Travel Speed
Relay Transport
Long Line Fishing
Nonferrous Metals
Ammonium Sulfate
Organic Fertilizers